Joanne R. Lupton, Ph.D. Curriculum Vitae

POSITION: Regents Professor, University Faculty Fellow and William W. Allen

Endowed Chair in Human Nutrition

Texas A&M University

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EDUCATION:

Institution and Location	<u>Degree</u>	Year Conferred	Field of Study
Mt. Holyoke College	B.A.		Philosophy
California State University	M.S.		Foods and Nutrition
University of California, Davis	Ph.D.		Nutrition (Minor,
•			Physiological Chemistry)
Post Doctoral Fellow/			
UC Davis Medical School			Clinical Nutrition

PROFESSIONAL AND ACADEMIC APPOINTMENTS:

1980-1984	Post-Graduate Research Associate, Associate Instructor, Post-Doctoral Fellow
	University of California, Davis
1984-1989	Assistant Professor of Nutrition, Department of Animal Science
	Texas A&M University, College Station, Texas
1989-present	Cross-appointed Department of Veterinary Anatomy and Public Health,
	College of Veterinary Medicine, now Veterinary Integrative Biosciences, Texas
	A&M University
1989-1996	Associate Professor of Nutrition, Department of Animal Science,
	Texas A&M University
1990-1993	Founding Chair, Faculty of Nutrition, Texas A&M University
1995-2005	Section Leader, Human Nutrition, Dept. of Animal Science
1995-present	William W. Allen Endowed Chair in Human Nutrition
1996-present	Professor, Texas A&M University
1999-present	Regents Professor, Texas A&M University
2000-present	University Faculty Fellow, Texas A&M University
2003	Visiting Scholar (one year), Food and Drug Administration, Center for Food
	Safety and Applied Nutrition
2005-present	Professor in the Department of Nutrition and Food Science
2005-present	President-Elect American Society for Nutritional Sciences (ASNS)

TEACHING:

Awards.

Award in Excellence from Texas A&M University for Excellence in Undergraduate Teaching, 1989.

The Association of Former Students of Texas A&M University Distinguished Teaching Award, 1990-1991.

USDA National Award for Teaching, Southern Region, 1996.

Transfer Camp "T Camp" Namesake, Texas A&M University, 1997.

Committee to select the 1997/1998 USDA National Teaching Awards, 1997.

V.F. and Gertrude Neuhaus Teaching Scholars Program Award, 1998.

Kellogg Project to Improve and Reward Teaching. Department of Animal Science's representative for this project, 1996-1999.

Recipient The American Society for Nutritional Sciences/Dannon Institute Mentorship Award, 2004.

Committee to select the 2005/2006 USDA National Teaching Awards, 2005.

Developed and taught the following courses at Texas A&M University:

<u>Course</u>	Description	Years Taught
Nutrition 202	Basic nutrition. Proteins, carbohydrates, lipids vitamins and minerals.	1985-1988 1990-1992
Nutrition 203	Basic nutrition for majors.	1992-2001
Nutrition 444	Nutrition in the Life Cycle. How physiological changes at different stages of the life cycle manifest themselves in changing nutritional requirements.	1984-1991
Nutrition 470	Physiological Chemistry. Tissue specific metabolism of proteins, carbohydrates and lipids and the controls on metabolism.	1990-present
Nutrition 481	Senior Seminar. How to review the current literature and give a seminar using Power Point.	1996-present
Nutrition 485	Undergraduate research problems. Teach every semester.	1985-present
Nutrition 485	Undergraduate research honors. Have had three Honors University Fellows.	
Nutrition 489	Diet, heart disease and cancer.	1988,1989
Nutrition 681	Nutrition seminar. Started the seminar series and coordinated it 1986-1993.	1986-1993

Nutrition 685	Graduate problems. Teach most semesters.	1985-present
Nutrition 690	Graduate Course on How to give a scientific presentation.	1989-1996
Nutrition 691	Graduate Research. Teach every semester.	1985-present
Meid 981	Nutrition for medical students. Helped to develop the course and teach one to two lectures each year.	1993-present

DOCUMENTATION OF RESEARCH -REFEREED PUBLICATIONS:

¹ = undergraduate student

 2 = graduate student

 3 = post doctoral fellow

- 1. Jacobs LR and <u>Lupton JR</u>. Dietary wheat bran lowers colonic pH in rats. J. Nutr. 112:592-594, 1982.
- 2. Jacobs LR and <u>Lupton JR</u>. Effect of dietary fibers on rat large bowel mucosal growth and cell proliferation. Am. J. Physiol. 246:G378-G385, 1984.
- 3. <u>Lupton JR</u>. Colon epithelial cell kinetics. Gastroenterology 80:251-252, 1984.
- 4. <u>Lupton JR</u> and **Gazzaniga JM**². Graduate research: a guide for students in the sciences. BioScience 25:668-669, 1985.
- 5. <u>Lupton JR</u>, Coder DM and Jacobs LR. Influence of luminal pH on rat large bowel epithelial cell kinetics. Am. J. Physiol. 249:G382-G388, 1985.
- 6. <u>Lupton JR</u> and Ferrell RG. Using density rather than mass to express the concentration of gastrointestinal tract constituents. J. Nutr. 116:164-168, 1986.
- 7. Jacobs LR and <u>Lupton JR</u>. Relationship between colonic luminal pH, cell proliferation, and colon carcinogenesis in 1,2-dimethylhydrazine treated rats fed high fiber diets. Cancer Res. 46:1727-1734, 1986.
- 8. <u>Lupton JR</u> and Jacobs LR. Fiber supplementation results in expanded proliferative zones in rat gastric mucosa. Am. J. Clin. Nutr. 46:980-4, 1987.
- 9. **Gazzaniga JM**² and <u>Lupton JR</u>. Dilution effect of dietary fiber sources: an in vivo study in the rat. Nutr. Research 7:1261-1268, 1987.
- 10. <u>Lupton JR</u>, Coder DM and Jacobs LR. Long term effects of fermentable fibers on the rat colonic pH and the epithelial cell cycle. J. Nutr. 118:840-845, 1988.
- 11. <u>Lupton JR</u>. Book Review of *Handbook of Dietary Fiber in Human Nutrition*. Gene A. Spiller, ed. J. Nutr. 118:1055, 1988.
- 12. <u>Lupton JR</u> and **Meacher MM**². Radiographic analysis of the effect of dietary fibers on rat colonic transit time. Am. J. Physiol. 255:G633-G639, 1988.
- 13. <u>Lupton JR</u> and **Marchant LJ**². Independent effects of fiber and protein on colonic luminal ammonia concentration. J. Nutr. 119:235-241, 1989.
- 14. Newmark HL and <u>Lupton JR</u>. Determinants and consequences of colonic luminal pH: Implications for colon cancer. Nutr. Cancer 14:161-173, 1990.

- 15. Deschner EE, Ruperto JF, <u>Lupton JR</u> and Newmark HL. Dietary butyrate (tributyrin) does not enhance AOM-induced colon tumorigenesis. Cancer Lett. 53:79-82, 1990.
- 16. <u>Lupton JR</u> and **Yung KY**². Interactive effects of oat bran and wheat bran on serum and liver lipids and colonic physiology. Cereal Foods World 36:827-831, 1991.
- 17. <u>Lupton JR</u>. Dietary fiber and short-chain fatty acids Implications for colon cancer: animal models. In: *Short Chain Fatty Acids: Metabolism and Clinical Importance*. Report of the Tenth Ross Conference on Medical Research, 86-90, 1991.
- 18. <u>Lupton JR</u> and Newmark HL. Relationship between stool pH and butyrate level. Nutr. Cancer 16:76-77, 1991.
- 19. **Lee D-YK**², <u>Lupton JR</u> and Chapkin RS. Prostaglandin profile and synthetic capacity of the colon: comparison of tissue sources and subcellular fractions. Prostaglandins 43:143-164, 1992.
- 20. **Danz RA**² and <u>Lupton JR</u>. Physiological effects of dietary amaranth (*Amaranthus Cruentus*) on rats. Cereal Foods World 37: 489-494, 1992.
- 21. Boffa LC, <u>Lupton JR</u>, Mariani MR, Ceppi M, Newmark HL, Scalmati A and Lipkin M. Modulation of colonic epithelial cell proliferation, histone acetylation and luminal short chain fatty acids by variation of dietary fiber (wheat bran) in rats. Cancer Res. 52:5906-5912, 1992.
- 22. **Rooney TK**¹, Rooney LW and <u>Lupton JR</u>. Physiological characteristics of sorghum and millet brans in the rat model. Cereal Foods World 37:782-786, 1992.
- 23. Chapkin RS, Gao J, Lee D-YK² and <u>Lupton JR</u>. Dietary fibers and fats alter rat colon protein kinase C activity: correlation to cell proliferation. J. Nutr. 123:649-655, 1993.
- 24. <u>Lupton JR</u> and **Kurtz PP**². Relationship of colonic luminal short chain fatty acids and pH to in vivo cell proliferation. J. Nutr. 123:1522-1530, 1993.
- 25. Lee DY-K², Chapkin RS and <u>Lupton JR</u>. Dietary fat and fiber modulate colonic cell proliferation in an interactive site specific manner. Nutr. Cancer 20:107-118, 1993.
- 26. <u>Lupton JR</u>, **Morin JL**² and **Robinson MC**². Barley bran flour accelerates gastrointestinal transit time. J. Amer. Diet. Assoc. 93:881-885, 1993.
- 27. <u>Lupton JR</u> and **Lee D-YK**². Dietary fat and colon cancer. Korean Journal of Lipidology 3:16-22, 1993.
- 28. Lee D-YK², <u>Lupton JR</u>, Aukema HM and Chapkin RS. Dietary fat and fiber alter rat colonic mucosal lipid mediators and cell proliferation. J. Nutr. 123:1808-1817, 1993.
- 29. <u>Lupton JR</u>, **Robinson MC**² and **Morin JL**². Cholesterol-lowering effect of barley bran flour and oil. J. Am. Diet. Assoc. 94:65-70, 1994.
- 30. **Chang W-CL**², <u>Lupton JR</u>, Frolich W, Schoeffler GL, Peterson ML and **Chen X-Q**². A very low intake of fat is required to decrease colonic cell proliferation and fecal bile acid concentrations in rats. J. Nutr. 124:181-187, 1994.
- 31. <u>Lupton JR</u>, Chen X-Q², Frolich W, Schoeffler GL and Peterson ML. Increased levels of calcium in high fat diets decrease fecal concentrations of bile acids in rats to levels found from low fat diets. J. Nutr. 124:188-195, 1994.
- 32. Steinbach G, Morotomi M, Nomoto K, <u>Lupton JR</u>, Weinstein IB and Holt PR. Calcium reduces the increased fecal 1,2-sn-diacylglycerol content in intestinal bypass patients: a possible mechanism for altering colonic hyperproliferation. Cancer Res. 54:1216-1219, 1994.
- 33. Newmark HL, <u>Lupton JR</u> and Young CW. Butyrate as a differentiating agent: pharmacokinetics, analogues, and current status. Cancer Lett. 78:1-5, 1994.

- 34. Steinbach G, <u>Lupton JR</u>, Reddy BS, Kral JG and Holt PR. Effect of calcium supplementation on rectal epithelial hyperproliferation in intestinal bypass patients. Gastroenterology 106:1162-1167, 1994.
- 35. Davidson LA, **Jiang Y-H**², Derr JN, Aukema HM, <u>Lupton JR</u> and Chapkin RS. Protein kinase C isoforms in human and rat colonic mucosa. Arch. Biochem. Biophys. 312:547-553, 1994.
- 36. **Zhang J**² and <u>Lupton JR</u>. Dietary fibers stimulate colonic cell proliferation by different mechanisms at different sites. Nutr. Cancer 22:267-276, 1994.
- 37. <u>Lupton JR</u> and Cross HR. The contributions of meat, poultry and fish to the health and well being of man. In: *Quality Attributes and Their Measurement in Meat, Poultry and Fish Products*. A.M. Pearson & T.R. Dutson, eds. pp 479-500, 1994.
- 38. Aukema HA, Davidson LA, **Chang W-CL**², <u>Lupton JR</u>, Derr JN and Chapkin RS. Diet modulation of rat colonic cAMP-dependent protein kinase activity. Biochim. Biophys. Acta, 1224:51-60, 1994.
- 39. <u>Lupton JR</u>. Short chain fatty acids and colon tumorigenesis: animal models. In: *Physiological and Clinical Aspects of Short Chain Fatty Acid Metabolism.* JH Cummings, JL Rombeau and T. Sakata, eds. Cambridge University Press, Cambridge, UK. pp 307-319, 1995.
- 40. <u>Lupton JR</u>. Fat/fiber interactions: effect on colon physiology and colonic cytokinetics. In: *Dietary Fiber in Health & Disease*. D Kritchevsky and C Bonfield, eds. pp 115-125, Eagan Press., St. Paul, MN., 1995.
- 41. Davidson LA, <u>Lupton JR</u>, **Jiang Y-H**², **Chang WC**², Aukema HM and Chapkin RS. Diet induced alteration of rat colon protein kinase C isozyme expression. J. Nutr. 125:49-56, 1995
- 42. **Pickering JS**², <u>Lupton JR</u> and Chapkin RS. Dietary fat, fiber and carcinogen alter fecal diacylglycerol composition and mass. Cancer Res. 55:2293-2298, 1995.
- 43. **Jiang Y-H**², Davidson LA, <u>Lupton JR</u> and Chapkin RS. A rapid RT-PCR method for detection of intact RNA in formalin-fixed paraffin embedded tissues. Nucleic Acids Res. 23:3071-3072, 1995.
- 44. <u>Lupton JR</u>. Butyrate and colonic cytokinetics: differences between in vitro and in vivo studies. Eur. J. Cancer Prev. 4:373-378, 1995.
- 45. Davidson LA, **Jiang Y-H**², <u>Lupton JR</u> and Chapkin RS. Non-invasive detection of putative biomarkers for colon cancer using fecal mRNA. Cancer Epidemiol. Biomarkers Prev. 4:643-647, 1995.
- 46. **Jiang Y-H²**, Aukema HM, Davidson LA, <u>Lupton JR</u> and Chapkin RS. Localization of protein kinase C isozymes in rat colon. Cell Growth Differ. 6:1381-1386, 1995.
- 47. <u>Lupton JR</u>, **Chen X-Q**² and Frolich W. Calcium phosphate supplementation results in lower rat fecal bile acid concentrations and a more quiescent colonic cell proliferation pattern than does calcium lactate. Nutr. Cancer 23:221-231, 1995.
- 48. **Jiang Y-H²**, Davidson LA, <u>Lupton JR</u> and Chapkin RS. Rapid competitive PCR determination of relative gene expression in limiting tissue samples. Clin. Chem. 42:227-231, 1996.
- 49. <u>Lupton JR</u>, Steinbach G, **Chang W-CL²**, O'Brien BC, Wiese S, Stoltzfus CL, Glober G, Wargovich MJ, McPherson RS and Winn RJ. Calcium supplementation modifies the relative amounts of bile acids in bile and affects key aspects of human colon physiology. J. Nutr. 126:1421-1428, 1996.

- 50. **Jiang Y-H²**, <u>Lupton JR</u>, **Chang W-CL²**, **Jolly CA²**, Aukema HM and Chapkin RS. Dietary fat and fiber differentially alter intracellular second messengers during tumor development in rat colon. Carcinogenesis 17:1227-1233, 1996.
- 51. Holt PR, Atillasoy E, Lindenbaum J, Ho SB, <u>Lupton JR</u>, McMahon D and Moss SF. Effects of acarbose on fecal nutrients, colonic pH and short chain fatty acids and rectal proliferative indices. Metabolism 45:1179-118, 1996.
- 52. Steinbach G, <u>Lupton JR</u>, Reddy BS, Lee JJ, Kral JC and Holt PR. Calcium carbonate treatment of diarrhea in intestinal bypass patients. Eur. J. Gastroenterol. Hepatol. 8:559-562, 1996.
- 53. **Zoran DL**², Barhoumi R, Burghardt, RC, Chapkin RS and <u>Lupton JR</u>. Diet and carcinogen alter luminal butyrate concentration and intracellular pH in isolated rat colonocytes. Nutr. Cancer 27:222-230, 1997.
- 54. **Hong M-Y²**, **Chang W-CL²**, Chapkin RS and <u>Lupton JR</u>. Relationship among colonocyte proliferation, differentiation and apoptosis as a function of diet and carcinogen. Nutr. Cancer 28:20-29, 1997.
- 55. Aukema HM, Davidson LA, Pence BC, **Jiang Y-H²**, <u>Lupton JR</u> and Chapkin RS. Butyrate alters activity of specific cAMP-receptor proteins in a transgenic mouse colonic cell line. J. Nutr. 127:18-24, 1997.
- 56. **Jiang YH**², <u>Lupton JR</u> and Chapkin RS. Dietary fish oil blocks carcinogen-induced down-regulation of colonic protein kinase C isozymes. Carcinogenesis 18:351-357, 1997.
- 57. **Maciorowski KG**², Turner ND, <u>Lupton JR</u>, Chapkin RS, Shermer CL, Ha SD and Ricke SC. Diet and carcinogen alter the fecal microbial populations of rats. J. Nutr. 127:449-457, 1997.
- 58. **Chang W-CL**², Chapkin RS and <u>Lupton JR</u>. Predictive value of proliferation, differentiation and apoptosis as intermediate markers for colon tumorigenesis. Carcinogenesis 18:721-730, 1997.
- 59. **Jiang Y-H²**, <u>Lupton JR</u> and Chapkin RS. Dietary fat and fiber modulate the effect of carcinogen on colonic PKC lamda expression in rats. J. Nutr. 127:1938-1943, 1997.
- 60. <u>Lupton JR</u>. Dairy products and colon cancer: mechanisms of the protective effect. Invited Editorial, Am. J. Clin. Nutr. 66:1065-1066, 1997.
- 61. **Zoran DL**², Turner ND, Taddeo SS, Chapkin RS and <u>Lupton JR</u>. Wheat bran diet reduces tumor incidence in a rat model of colon cancer independent of effects on distal luminal butyrate concentrations. J. Nutr. 127:2217-2225, 1997.
- 62. Chapkin RS, **Jiang Y-H**², Davidson LA and <u>Lupton JR</u>. Modulation of intracellular second messengers by dietary fat during colonic tumor development. Adv. Exp. Med. Biol. 422:85-96, 1997.
- 63. Battershill JM, Greig JB and <u>Lupton JR</u>. Toxicological monograph on SALATRIM. Food and Agriculture Organization of the United Nations in Collaboration with the World Health Organization. WHO Food additives series 40, International Programme on Chemical Safety, World Health Organization, Geneva, pp 111-141, 1997.
- 64. Davidson LA, **Aymond CM²**, **Jiang Y-H²**, Turner ND, <u>Lupton JR</u> and Chapkin RS. Non-invasive detection of fecal protein kinase C β_{II} and ζ messenger RNA: putative biomarkers for colon cancer. Carcinogenesis 19:253-257, 1998.
- 65. **Chang W-CL**², Chapkin RS and <u>Lupton JR</u>. Fish oil blocks azoxymethane-induced tumorigenesis by increasing cell differentiation and apoptosis rather than decreasing cell proliferation. J. Nutr. 128:491-497, 1998.

- 66. **Zhang J**², Wu G, Chapkin RS and <u>Lupton JR</u>. Energy metabolism of rat colonocytes changes during the tumorigenic process and is dependent on diet and carcinogen. J. Nutr. 128:1262-1269, 1998.
- 67. <u>Lupton JR</u>, Chang W-CL², Hong MY², and Chapkin RS. Diet effects on apoptosis during colon carcinogenesis. Annals of the Academy of Studenica 1:37-40, 1998.
- 68. Chapkin RS, Clark AE², Davidson LA, Schroeder F, Zoran DL² and <u>Lupton JR</u>. Dietary fiber differentially alters cellular fatty acid binding protein expression in exfoliated colonocytes during tumor development. Nutr. Cancer 31:107-112, 1998.
- 69. <u>Lupton JR</u>. Book review of *Dietary Fiber in Health and Disease*, D Kritchevsky and C Bonfield, eds. Am. J. Clin. Nutr. 68:1308-1309, 1998.
- 70. <u>Lupton JR</u> and Turner ND. Potential protective mechanisms of wheat bran fiber. Amer. J. Med. 106:245-275, 1999.
- 71. Davidson LA, <u>Lupton JR</u>, **Jiang Y-H²**, and Chapkin RS. Carcinogen and dietary lipid regulate ras expression and localization in rat colon without affecting farnesylation kinetics. Carcinogenesis 20:785-791, 1999.
- 72. Battershill JM, Greig JB and <u>Lupton JR</u>. Miscellaneous substance: salatrim (short- and long-chain acyltriglyceride molecules). In: *Evaluation of Certain Food Additives and Contaminants*. WHO Technical Report Series 884, World Health Organization, Geneva, pp 23-25, 1999.
- 73. Fan YY², Zhang J², Barhoumi R, Burghardt RC, Turner ND, <u>Lupton JR</u> and Chapkin RS. Antagonism of CD95 (APO-1/Fas) signaling blocks butyrate induction of apoptosis in young adult mouse colonic (YAMC) cells. Am. J. Physiol. 277 (Cell Physiol. 46):C310-C319, 1999.
- 74. <u>Lupton JR</u>, Chang W-CL², Hong MY² and Chapkin RS. Fat/fiber interactions on colonic cytokinetics: relationship to colon cancer. Asia Pacific J. Clin. Nutr. 8:S37-S40, 1999.
- 75. <u>Lupton JR</u> and Turner ND. Dietary Fiber. In: *Biochemical and Physiological Aspects of Human Nutrition*. MH Stipanuk, ed. WB Saunders Company, Philadelphia, PA, Chapter 8, pp 143-154, 2000.
- 76. Chapkin RS and <u>Lupton JR</u>. Colonic cell proliferation and apoptosis in rodent species: modulation by diet. Adv. Exp. Med. Biol. 470:105-118, 1999.
- 77. **Hong MY**³, Chapkin RS, Wild CP, **Morris JS**², Wang N, Carroll RJ, Turner ND and <u>Lupton JR</u>. Relationship between DNA adduct levels, repair enzyme and apoptosis as a function of DNA methylation by azoxymethane. Cell Growth Differ. 10:749-758, 1999.
- 78. Chapkin RS, **Fan YY**³ and <u>Lupton JR</u>. Effect of diet on colonic-programmed cell death: molecular mechanism of action. Toxicol. Lett. 112-113: 411-414, 2000.
- 79. **Maier SM²**, Turner ND and <u>Lupton JR</u>. Serum lipids in hypercholesterolemic men and women consuming oat bran and amaranth products. Cereal Chem. 77:297-302, 2000.
- 80. <u>Lupton JR</u>. Is fiber protective against colon cancer? Where the research is leading us. Nutrition 16:558-561, 2000.
- 81. Collett ED², Davidson LA, <u>Lupton JR</u> and Chapkin RS. Dietary fish oil reduces colon cancer risk. Current Organic Chemistry 4:945-957, 2000.
- 82. **Hong MY**³, <u>Lupton JR</u>, **Morris JS**², Wang N, Carroll RJ, Davidson LA, Elder RH and Chapkin RS. Dietary fish oil reduces O⁶ methylguanine DNA adduct levels in rat colon in part by increasing apoptosis during tumor initiation. Cancer Epidemiol. Biomarkers Prev. 9:819-826, 2000.

- 83. Davidson LA, **Brown RE**², **Chang W-CL**², **Morris JS**², Wang N, Carroll RJ, Turner ND, <u>Lupton JR</u> and Chapkin RS. Morphodensitometric analysis of protein kinase C β_{II} expression in rat colon: modulation by diet and relation to *in situ* cell proliferation and apoptosis. Carcinogenesis 21:1513-1519, 2000.
- 84. Collett ED², Davidson LA, Fan Y-Y³, <u>Lupton JR</u> and Chapkin RS. n-6 and n-3 polyunsaturated fatty acids differentially modulate oncogenic Ras activation in colonocytes. Am. J. Physiol. 280:C1066-C1075, 2001.
- 85. <u>Lupton JR</u>, Fahey GC, Jenkins DA, Marlett JA, Slavin JL, Story JA and Williams CL. Dietary reference intakes. Proposed definition of dietary fiber. A report of the panel on the definition of dietary fiber and the standing committee on the scientific evaluation of dietary reference intakes. Food and Nutrition Board, Institute of Medicine. National Academy Press, Washington, DC, 2001.
- 86. **Hong MY**², Chapkin RS, **Morris JS**², Wang N, Carroll RJ, Turner ND, **Chang WC**², Davidson LA and <u>Lupton JR</u>. Anatomical site-specific response to DNA damage is related to later tumor development in the rat AOM colon carcinogenesis model. Carcinogenesis 22: 1831-1835, 2001.
- 87. **Morris JS²**, Wang N, <u>Lupton JR</u>, Chapkin RS, Turner ND, **Hong MY³** and Carroll RJ. Parametric and nonparametric methods for understanding the relationship between carcinogen-induced DNA adduct levels in distal and proximal regions of the colon. JASA 96:816-826, 2001.
- 88. **Morris JS**², Wang N, <u>Lupton JR</u>, Chapkin RS, Turner ND, **Hong MY**³ and Carroll RJ. A Bayesian analysis of colonic crypt structure and coordinated response to carcinogen exposure incorporating missing crypts. Biostatistics 3:529-546, 2002.
- 89. Chapkin RS, **Hong MY**³, **Fan YY**³, Davidson LA, **Sanders LM**², **Henderson CE**², Barhoumi R, Burghardt RC, Turner ND and <u>Lupton JR</u>. Dietary n-3 PUFA alter colonocyte mitochondrial membrane composition and function. Lipids 37: 193-199, 2002.
- 90. Turner ND, **Zhang J**³, Davidson LA, <u>Lupton JR</u>, and Chapkin RS. Oncogenic ras alters sensitivity of colonocytes to butyrate and fatty acid mediated growth arrest and apoptosis. Cancer Lett. 186:29-35, 2002.
- 91. **Hong MY**³, Chapkin RS, Barhoumi R, Burghardt RC, Turner ND, **Henderson CE**², **Sanders LM**², **Fan YY**³, Davidson LA, Murphy ME, **Spinka CM**², Carroll RJ and <u>Lupton JR</u>. Fish oil feeding increases the unsaturation index in mitochondrial phospholipids, enhancing reactive oxygen species generation and initiating apoptosis in rat colonocytes. Carcinogenesis 23:1919-1925, 2002.
- 92. Turner ND, Braby LA, Ford J and <u>Lupton JR</u>. Opportunities for nutritional amelioration of radiation-induced cellular damage. Nutrition 18:904-912, 2002.
- 93. Benford D, Grieg JB, <u>Lupton JR</u>, and Leclercq C. SALATRIM (Short-and long chain acyltriglyceride molecules). WHO Food Additives Series 50, International programme on Safety evaluation of certain food additives, World Health Organization, Geneva, pp 135-166, 2002.
- 94. Davidson LA, <u>Lupton JR</u>, Miskovsky E, Fields AP and Chapkin RS. Quantitation of human intestinal gene expression profiles using exfoliated colonocytes. Biomarkers 8:51-61, 2003.

- 95. **Bancroft LK**², <u>Lupton JR</u>, Davidson LA, Taddeo SS, Murphy ME, Carroll RJ and Chapkin RS. Dietary fish oil reduces oxidative DNA damage in rat colonocytes. Free Rad. Biol. Med. 35:149-159, 2003.
- 96. **Hong MY**³, Chapkin RS, Davidson LA, Turner ND, **Morris JS**², Carroll RJ, and <u>Lupton JR</u>. Fish oil enhances targeted apoptosis during colon tumor initiation in part by down regulating bcl-2. Nutr. Cancer 46:44-51, 2003.
- 97. <u>Lupton JR</u>, Turner ND. Dietary fiber and coronary disease: Does the evidence support an association? Curr. Atheroscler. Rep. 5:500-505, 2003.
- 98. **Apanasovich TV**², <u>Lupton JR</u>, **Popovic N**², Chapkin RS, Turner ND, Sheather S, Carroll RJ. Testing for spatial correlation in binary data with application to aberrant crypt foci in colon carcinogenesis. Biometrics 59:752-761, 2003.
- 99. Morris JS, Wang N, <u>Lupton JR</u>, Chapkin RS, Turner ND, Hong MY, and Carroll RJ. Understanding the relationship between carcinogen-induced DNA adduct levels in distal and proximal regions of the colon. Adv. Exp. Med. Biol. 537:105-116, 2003.
- 100. Wu G, Fang Y-Z, Yang S, <u>Lupton JR</u>, and Turner ND. Glutathione metabolism and its implications for health. J. Nutr. 134: 489-492, 2004.
- 101. <u>Lupton JR</u> and Chapkin RS. Chemopreventive Effects of Omega-3 Fatty Acids. In: *Cancer Chemoprevention, Volume 1: Promising Cancer Chemoprevention Agents*.

 Kelloff GJ and Sigman CC ed. Humana Press Inc., Totowa NJ, Chapter 39, pp 591-608, 2004.
- 102. **Ma DWL**³, Davidson LA, Callaway ES, **Seo J**², **Fan YY**³, <u>Lupton JR</u> and Chapkin RS. *n*-3 PUFA alter caveolae lipid composition and ras location in mouse colon. Published on line. FASEB J. published Apr 14, 2004 doi:10.1096/fj.03-1430fje
- 103. <u>Lupton JR.</u> Microbial degradation products influence colon cancer risk: the butyrate controversy. J. Nutr. 134:479-482, 2004.
- 104. **Sanders LM², Henderson CE², Hong MY³**, Barhoumi R, Burghardt RC, Carroll RJ, Turner ND, Chapkin RS, and <u>Lupton JR</u>. Pro-oxidant environment of the colon compared to the small intestine may contribute to greater cancer susceptibility. Cancer Lett. 208:155-161, 2004.
- 105. Davidson LA, Danh VN, Hokanson RM, Callaway ES, Isett RB, Turner ND, Dougherty ER, <u>Lupton JR</u>, Carroll RJ and Chapkin RS. Chemopreventive n-3 Polyunsaturated Fatty Acids Reprogram Genetic Signatures During Colon Cancer Initiation and Progression in the Rat. Cancer Res. 64: 6797-6804, 2004.
- 106. **Ma DW**³, **Seo J**², **Switzer KC**², **Fan YY**³, McMurray DN, <u>Lupton JR</u> and Chapkin RS. N-3 PUFA and membrane microdomains: A new frontier in bioactive lipid research. J. Nutr. Biochem. 11:700-706, 2004.
- 107. Sanders LM², Henderson CE², Hong MY³, Barhoumi R, Burghardt RC, Wang N, Spinka CM², Carroll RJ, Turner ND, Chapkin RS and <u>Lupton JR</u>. An increase in reactive oxygen species by dietary fish oil coupled with the attenuation of antioxidant enzyme defenses by dietary pectin enhances rat colonocyte apoptosis. J. Nutr. 134:3233-3238, 2004.
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- Annual Meeting of the Vegetable and Fruit Improvement Center, Houston, TX, June 6, 2004.
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- 135. Hill D, **Ma DWL**³, <u>Lupton JR</u>, Chapkin RS and Finnell RH. Folate transport gene ablation in mice increases sensitivity to colon carcinogenesis. Presented at the folic acid, vitamin B₁₂ and one-carbon metabolism, FASEB Summer Research Conference, Snowmass, CO, July 31-August 5, 2004.
- 136. <u>Lupton JR</u>. Current status of the definition of dietary fiber in the US and the science behind the recommendation for fiber. Presented at the Symposium on Dietary Fiber, Osaka, Japan, September 17, 2004.
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- 141. Turner ND, Davidson LA, Braby LA, Ford JR, Carroll RJ, Wang N, Chapkin RS and Lupton JR. Global transcriptional profiling using fecal material as a non-invasive biomarker of colon carcinogenesis. Bioastronautics Investigators' Workshop. Galveston, TX, January 10-12, 2005.
- 142. Turner ND, Warren CA², Paulhill KJ², Sanders LM², Hong MY³, Covert KL, ²
 Davidson LA, Chapkin RS and <u>Lupton JR</u>. Fermentation products in colon health:
 Mediators of cell kinetics and gene expression. 2005 Conference on Gastrointestinal Function, Chicago, IL, April 2005.
- 143. **Hong MY**³, Turner ND, Murphy ME, Carroll RJ, Chapkin RS, and <u>Lupton JR</u>. Dietary fish oil may decrease colonic cell proliferation by upregulating p27^{Kip1} level in actively proliferating cells. FASEB J. 19:A1694, 2005.
- 144. **Hong MY**³, Turner ND, Murphy ME, Carroll RJ, Chapkin RS and <u>Lupton JR</u>. Dietary fish oil reduces N7-deoxymethylguanine adducts by enhancing apoptosis at the initiation stage of carcinogenesis in the small (SI) and large intestine (LI). FASEB J. 19:A80, 2005.

- 145. **Hong MY³**, Turner ND, Carroll RJ, Chapkin RS and <u>Lupton JR</u>. Higher DNA adduct levels and lower apoptosis may explain the higher cancer susceptibility in the distal colon compared to the rest of the gastrointestinal tract. FASEB J. 19:A760, 2005.
- 146. **Sanders LM**², Wu G, Turner ND, Chapkin RS and <u>Lupton JR</u>. Dietary fat and fiber modulate the colonic redox environment during the initiation stage of radiation-enhanced colon carcinogenesis in rats. FASEB J. 19:A776, 2005.
- 147. **Seo J²**, Barhoumi R, <u>Lupton JR</u> and Chapkin RS. Docosahexaenoic acid-induced inhibition of plasma membrane targeting is reversible and selective to lipidated cytosolic proteins. FASEB J. 19:A1455, 2005.
- 148. **Vanamala J**², **Leonardi T**², Murphy ME, Taddeo SS, Patil BS, Pike LM, Chapkin RS and <u>Lupton JR</u>. Reduced iNOS and COX-2 levels are associated with enhanced apoptosis induced by grapefruit pulp and limonin in rat colonocytes. FASEB J. 19:A775, 2005.
- 149. Turner ND, Warren CA², Paulhill KJ¹, Sanders LM², Hong MY³, Covert KL², Davidson LA, Chapkin RS and <u>Lupton JR</u>. Fermentation products in colon health: Mediators of cell kinetics and gene expression. 2005 Conference on Gastrointestinal Function, Chicago, IL, April 2005.
- 150. <u>Lupton JR</u>, **Sanders LM**², **Mann JC**², **Popovic N**², **Glagolenko** AA², Davidson LA, Braby LA, Ford JR, Carroll RJ, Wang N, Chapkin RS and Turner ND. A combination of omega-3 fatty acids and a butyrate-producing fiber mitigates colon cancer development. 16th Annual NASA Space Radiation Investigators' Workshop, Port Jefferson, NY, May 15-18, 2005.
- 151. <u>Lupton JR</u>. Dietary guidelines perspective on glycemic carbohydrates and sugar. Institute of Food Technologists Annual Meeting, New Orleans, LA, July 17-19, 2005. Accepted for publication.
- 152. <u>Lupton JR.</u> 2005 Dietary Guidelines for carbohydrates and fiber. Institute of Food Technologists Annual Meeting, New Orleans, LA, July 17-19, 2005. Accepted for publication.

DOCUMENTATION OF RESEARCH -GRANT HISTORY:

1. Title: Alterations in human intestinal mucosal glycoconjugates in colon cancer and preneoplastic disease

Investigators: J.R. Lupton, PI (50% effort)

Agency: Office of Graduate Studies, University of California, Davis

Type: Graduate Research Grant: Period 7/1/81-6/30/82

Project Direct Costs: redacted

Specific Aims: To determine differences in mucosal glycoconjugates in preneoplastic disease

that predict for future tumor development.

2. Title: The effect of soluble and insoluble fibers on experimentally-induced gastric cancer

Investigators: **J.R. Lupton, PI** (50% effort)

Agency: Office of Graduate Studies, University of California, Davis

Type: Graduate Research Grant: Period 7/1/82-6/30/83

Project Direct Costs: redacted

Specific Aims: To determine how diet relates to gastric cancer and if the effect is mediated by

gastric pH.

3. Title: Stimulation of rat colonic epithelial cytokinetics by dietary acidification of luminal contents

Investigators: **J.R. Lupton, PI** (50% effort)

Agency: Office of Graduate Studies, University of California, Davis

Type: Graduate Travel Grant: Period 4/15/84

Project Direct Costs: redacted

Specific Aims: To present research findings at national meeting.

4. Title: Exploration of a possible link between diet and colon cancer

Investigators: J.R. Lupton, PI (50% effort)

Agency: Office of University Research, Texas A&M University

Type: Organized Research Development Grant: Period 9/15/84-8/31/85

Project Direct Costs: redacted

Specific Aims: To explore a potential link between fiber and colon cancer.

5. Title: *Dietary fiber/fat interactions and their relationship to colon cancer*

Investigators: **J.R. Lupton, PI** (50% effort)

Agency: Office of University Research, Texas A&M University

Type: Organized Research Development Grant: Period 9/15/85-8/31/86

Project Direct Costs: redacted

Specific Aims: To investigate a fat/fiber interaction with respect to colon cancer.

6. Title: A practical nutrition experiment

Investigators: **J.R. Lupton, PI** (10% effort)

Agency: Center for Teaching Excellence, Texas A&M University

Type: Teaching incentive grant: Period 9/15/85-8/31/86

Project Direct Costs: redacted

Specific Aims: To test the effectiveness of a diet intervention in the classroom.

7. Title: A possible protective role of calcium in colon carcinogenesis

Investigators: J.R. Lupton, PI (10% effort)

Agency: Office of University Research, Texas A&M University

Type: Interdisciplinary Improvement Research: Period 9/15/85-8/31/86

Project Direct Costs: redacted

Specific Aims: To test the effectiveness of calcium to decrease colon tumorigenesis.

8. Title: Fermentation of dietary fiber from common foods by human colonic microflora

Investigators: **J.R. Lupton, PI** (50% effort)

Agency: Office of University Research, Texas A&M University

Type: Organized Research Development Grant: Period 9/15/86-8/31/87

Project Direct Costs: redacted

Specific Aims: To develop a fiber fermentation system to test relative fermentability of different

fibers.

9. Title: *Statistical Evaluation for Research* Investigators: **J.R. Lupton, PI** (10% effort)

Agency: Office of University Research, Texas A&M University

Type: Computer grants for statistical analysis: Period 9/15/86-8/31/91

Project Direct Costs: redacted

Specific Aims: To statistically evaluate data from research projects.

10. Title: The effect of exercise and dietary fiber on the rate of gastrointestinal transit

Investigators: **J.R. Lupton, PI** (10% effort) Agency: National Institutes of Health

Type: Biomedical Research Support Grant: Period 9/15/86-8/31/87

Project Direct Costs: \$8,500

Specific Aims: To investigate a potential interactive effect between fiber and exercise on

gastrointestinal transit rate.

11. Title: Molecular mechanisms underlying dietary fiber/fat interactions in the etiology of colon

cancer

Investigators: J.R. Lupton, PI (20% effort), T.R. Irvin, Co-PI

Agency: Milheim Foundation for Cancer Research Type: Research Grant: Period 9/15/86-8/31/87

Project Direct Costs: redacted

Specific Aims: To determine the metabolism of the carcinogen dimethylhydrazine in colon cells

12. Title: Protein/fiber interactions: effect on colon carcinogenesis

Investigators: **J.R. Lupton, PI** (5% effort) Agency: Houston Livestock Show and Rodeo Type: Research Grant: Period 9/15/86-8/31/87

Project Direct Costs: redacted.

Specific Aims: To determine if dietary fiber can ameliorate the potentially promotive effects of

high protein diets against colon cancer.

13. Title: Calcium soap formation: a possible mechanism by which calcium protects against colon cancer

Investigators: J.R. Lupton, PI (20% effort)

Agency: Wisconsin Milk Marketing Board, administered by the National Dairy Council

Type: Research Grant: Period 9/15/86-8/31/88

Project Direct Costs: redacted.

Specific Aims: To determine if calcium protects against colon cancer by forming calcium soaps.

14. Title: Nutrient substitutions from animal products

Investigators: **J.R. Lupton, PI** (5% effort) Agency: Houston Livestock Show and Rodeo Type: Research Grant: Period 9/15/87-8/31/88

Project Direct Costs: redacted.

Specific Aims: Fiber and meat ratios to achieve the best bulking effect.

15. Title: *Physiological effects of dietary amaranth*

Investigators: J.R. Lupton, PI (10% effort)

Agency: Health Valley Foods

Type: Research Grant: Period 9/15/88-8/31/89

Project Direct Costs: redacted

Specific Aims: To test potential benefits of dietary amaranth.

16. Title: Mechanisms by which amaranth lowers serum cholesterol

Investigators: **J.R. Lupton, PI** (10% effort)

Agency: Health Valley Foods

Type: Research Grant: Period 9/15/88-8/31/89

Project Direct Costs: redacted

Specific Aims: To test how dietary amaranth lowers serum cholesterol.

17. Title: The effects of processed oat bran products on serum cholesterol levels of

hypercholesterolemic individuals

Investigators: J.R. Lupton, PI (20% effort)

Agency: Health Valley Foods

Type: Research Grant: Period 9/15/88-8/31/89

Project Direct Costs: redacted

Specific Aims: Clinical trial to determine the efficacy of various oat bran products to lower

cholesterol.

18. Title: *Protein/fiber interactions: effect on colon cytokinetics*

Investigators: **J.R. Lupton, PI** (5% effort) Agency: Houston Livestock Show and Rodeo Type: Research Grant: Period 9/15/88-8/31/89

Project Direct Costs: redacted

Specific Aims: How protein and fiber combinations affect colon cell kinetics

19. Title: Data analysis for oat bran products study

Investigators: **J.R. Lupton, PI** (5% effort)

Agency: Health Valley Foods

Type: Research Grant: Period 9/15/89-8/31/90

Project Direct Costs: redacted

Specific Aims: To statistically evaluate data from the oat bran clinical trial.

20. Title: Effect of barley on serum lipids and gastrointestinal transit

Investigators: J.R. Lupton, PI (20% effort)

Agency: Miller Brewing Company

Type: Research Grant: Period 9/15/89-8/31/90

Project Direct Costs: redacted

Specific Aims: Clinical trial to determine the effect of barley in individuals.

21. Title: *Physiological effects of dietary fibers* Investigators: **J.R. Lupton, PI** (30% effort)

Agency: USDA

Type: Hatch Grant: Period 9/15/89-present

Project Direct Costs: Variable amounts each year, supports technician, partial salary of JRL

Specific Aims: Determine the physiological effects of dietary fibers on health.

22. Title: Testing high-fiber products in a model system

Investigators: J.R. Lupton, PI (10% effort)

Agency: Health Valley Foods

Type: Research Grant: Period 9/15/89-8/31/90

Project Direct Costs: redacted

Specific Aims: In vitro tests to measure potential benefits of dietary fibers.

23. Title: Effect of soluble fibers on colonic physiology

Investigators: **J.R. Lupton, PI** (10% effort) Agency: American Institute for Cancer Research Type: Research Grant: Period 9/15/89-8/31/90

Project Direct Costs: redacted

Specific Aims: Rodent study to test the effects of fibers on colon cell kinetics

24. Title: *Health and nutritional factors and food consumption* Investigators: **J.R. Lupton, Co-PI** (20% effort); Oral Capps, Co-PI

Agency: Texas Agricultural Experiment Station

Type: Research Grant, Expanded Research Area: Period 9/15/89-8/31/91

Project Direct Costs: redacted

Specific Aims: To use dietary intake data from NHANES to determine food consumption

patterns and nutritional value

25. Title: *Physiological effects of sorghum, corn, rice*

Investigators: J.R. Lupton, Co-PI (20% effort); Lloyd Rooney, Co-PI

Agency: Texas Agricultural Experiment Station

Type: Research Grant, Expanded Research Area: Period 9/15/89-8/31/91

Project Direct Costs: redacted

Specific Aims: To use our rodent model to determine the physiological effects of sorghum, corn,

and rice.

26. Title: Mechanisms by which fibers lower cholesterol

Investigators: **J.R. Lupton, PI** (20% effort) Agency: Texas Agricultural Experiment Station

Type: Research Grant, Expanded Research Area: Period 9/15/89-8/31/91

Project Direct Costs: redacted

Specific Aims: To determine mechanisms by which fibers lower cholesterol.

27. Title: *Interaction of dietary fat and fiber*

Investigators: J.R. Lupton, Co-PI (20% effort); RS Chapkin, Co-PI

Agency: Texas Agricultural Experiment Station

Type: Research Grant, Expanded Research Area: Period 9/15/89-8/31/91

Project Direct Costs: redacted.

Specific Aims: To determine mechanisms by which fat and fiber interact to protect against colon

cancer.

28. Title: Dietary interactions between fats, calcium, and fiber

Investigators: **J.R. Lupton, PI** (20% effort) Agency: Norwegian Dairies Association Type: Research Grant: Period 9/15/89-8/31/91

Project Direct Costs: redacted.

Specific Aims: To determine mechanisms by which fat, fiber and calcium interact to protect

against colon cancer.

29. Title: A culturally sensitive weight loss program for Texans

Investigators: J.R. Lupton, PI (5% effort); B.A. Witcher and K. Dettwyler Co-PIs

Agency: Office of University Research, Texas A&M University Type: Interdisciplinary research award: Period 9/15/91-8/31/92

Project Direct Costs: redacted.

Specific Aims: To determine mechanisms by which Texans may lose weight.

30. Title: *Fat, fiber, calcium interactions* Investigators: **J.R. Lupton, PI** (20% effort) Agency: Norwegian Dairies Association

Type: Research Award: Period 9/15/91-8/31/93

Project Direct Costs: redacted.

Specific Aims: To determine mechanisms by which fat, fiber and calcium interact to protect

against colon cancer.

31. Title: *Effect of calcium in ileostomy patients*

Investigators: J.R. Lupton, PI of subcontract, (20% effort), G Steinbach, PI overall grant

Agency: National Institutes of Health, subcontract from MD Anderson Cancer Hospital,

Houston, TX

Type: Research Award: Period 9/15/91-8/31/93

Project Direct Costs: \$8,500.

Specific Aims: To determine the physiological effects of calcium on the large intestine in

individuals with ileostomies.

32. Title: Fat/fiber interactions: effect on colon cytokinetics

Investigators: J.R. Lupton, Co-PI, (20% effort), RS Chapkin, Co-PI

Agency: American Institute for Cancer Research Type: Research Award: Period 9/15/91-8/31/93

Project Direct Costs: redacted

Specific Aims: To determine how fat and fiber interact to protect against colon cancer

33. Title: *Phase I calcium trial*

Investigators: J.R. Lupton, Collaborator, subcontract (20% effort), R Winn, PI, MD Anderson

Cancer Center, Houston, TX

Agency: National Institutes of Health, National Cancer Institute Type: Research Award subcontract: Period 9/15/91-8/31/94

Project Direct Costs:

Specific Aims: To determine the safety of calcium supplements on the large intestine in a Phase

I trial.

34. Title: *Physiological effects of acarbose*

Investigators: J.R. Lupton, Collaborator, subcontract (5% effort), P. Holt, PI, Columbia

College of Physicians and Surgeons, New York, New York

Agency: National Institutes of Health, National Cancer Institute

Type: Research Award subcontract: Period 9/15/91-8/31/94

Project Direct Costs: \$9,700.

Specific Aims: To determine the effect of the starch blocker acarbose on colon physiology.

35. Title: Fat/fiber effects on colonocytes

Investigators: J.R. Lupton, Co-PI (10% effort), R.S. Chapkin, Co-PI, R. Burghardt, Co-PI

Agency: Office of University Research, Texas A&M University Type: Interdisciplinary Research Funds: Period 9/15/93-8/31/94

Project Direct Costs: redacted

Specific Aims: To determine fat/fiber effects on colonocytes.

36. Title: Noninvasive detection of colonic cellular markers: modulation by diet and carcinogen

Investigators: J.R. Lupton, Co-PI (20% effort), R.S. Chapkin, Co-PI

Agency: American Institute for Cancer Research Type: Research Award: Period 9/15/93-8/31/95

Project Direct Costs: redacted

Specific Aims: To test a noninvasive technique to predict for colon tumor development.

37. Title: Fat effect on colonic mucosal phospholipids, arachidonic acid cascade, cell

proliferation

Investigators: **J.R. Lupton, PI** (20% effort) Agency: Norwegian Dairies Association

Type: Research Award: Period 9/15/93-8/31/95

Project Direct Costs: redacted.

Specific Aims: To test if dairy fats inhibit the arachidonic acid cascade.

38. Title: Butyrate metabolism in transformed vs normal cells

Investigators: J.R. Lupton, PI (20% effort)

Agency: Office of University Research, Texas A&M University Type: Research Enhancement Funds: Period 9/15/93-8/31/95

Project Direct Costs: redacted

Specific Aims: To determine why butyrate has a protective effect against colon cancer in vitro,

and a promotive effect in vivo.

39. Title: Fiber, short chain fatty acids and colon cancer

Investigators: J.R. Lupton, PI (20% effort)

Agency: National Institutes of Health, National Cancer Institute Type: RO1 CA 61750 research grant: Period 9/15/94-8/31/99

Project Direct Costs: \$588,088

Specific Aims: To determine the relationship between fiber, short chain fatty acid production

and colon cancer.

40. Title: *Colonic cytokinetics and cell signaling: dietary effect* Investigators: J.R. Lupton, Co-PI (20% effort); RS Chapkin, PI Agency: National Institutes of Health, National Cancer Institute Type: RO1 CA 59034 research grant: Period 12/94-11/97

Project Direct Costs: \$449,314

Specific Aims: To study the mechanism(s) by which dietary fat modulates protein kinase C

expression and colonic cell proliferation in rats.

41. Title: Butyrate initiation of gene transcription: differential PCR

Investigators: J.R. Lupton, Co-PI (10% effort); RS Chapkin, Co-PI, N Ing Co-PI, L Jaeger, Co-

Agency: Office of University Research, Texas A&M University Type: Interdisciplinary Research Funds: Period 9/15/95-8/31/96

Project Direct Costs: redacted

Specific Aims: To determine genes that are turned on or off in response to butyrate

42. Title: Butyrate mediated signal transduction on colonocytes: role of cAMP-dependent protein kinase.

Investigators: J.R. Lupton, Mentor (10% effort); H Aukema, PI, RS Chapkin, mentor

Agency: American Institute for Cancer Research Type: Post Doctoral Award: Period 9/15/95-8/31/96

Project Direct Costs: redacted

Specific Aims: To determine how butyrate mediates signal transduction in colonocytes

43. Title: Effect of dietary fat source on phospholipase C gamma I activation in early stages of carcinogenesis.

Investigators: J.R. Lupton, Mentor (10% effort); YH Jiang, PI, RS Chapkin, Mentor

Agency: American Institute for Cancer Research Type: Post Doctoral Award: Period 9/15/97-8/31/98

Project Direct Costs: redacted

Specific Aims: To determine how fat source affects phospholipase C gamma I activation

44. Title: Effect of a chemopreventive diet on carcinogen induced colonic ras activation

Investigators: J.R. Lupton, Co-PI (20% effort); RS Chapkin, Co-PI

Agency: American Institute for Cancer Research Type: Research Award: Period 9/15/98-6/30/02

Project Direct Costs: redacted

Specific Aims: To determine how fat source affects ras activation

45. Title: *Phytate promotes apoptosis in colonocytes via inhibition of the PI3 kinase/Akt signaling pathway*

Investigators: J.R. Lupton, Mentor (10% effort); ND Turner, PI, RS Chapkin, Mentor

Agency: American Institute for Cancer Research Type: Post Doctoral Award: Period 9/15/97-8/31/98

Project Direct Costs: redacted

Specific Aims: To determine if phytate promotes apoptosis by inhibiting PI3 kinase.

46. Title: Use of a transgenic rat model to determine the mechanisms by which diet influences colon tumor development

Investigators: J.R. Lupton, Co-PI (10% effort); W. Foxworth, Co-PI; A. Kier, Co-PI

Agency: Office of University Research, Texas A&M University

Type: Interdisciplinary grant: Period 9/15/98-8/31/99

Project Direct Costs: redacted

Specific Aims: To develop a rat transgenic model for Protein Kinase C overexpression.

47. Title: Mechanisms by which select dietary lipids reduce colon cancer risk

Investigators: J.R. Lupton, Co-PI (20% effort); RS Chapkin, Co-PI, R Burghardt, Co-PI.

Agency: Office of University Research, Texas A&M University

Type: Interdisciplinary grant: Period 9/15/98-8/31/99

Project Direct Costs: redacted.

Specific Aims: To determine how dietary lipids reduce colon cancer risk.

48. Title: Communication techniques for health professionals

Investigators: **J.R. Lupton, PI,** (2% effort); ND Turner, Co-PI

Agency: Office of University Research, Texas A&M University

Type: V.F. and Gertrude Neuhaus Teaching Scholars Program: Period 9/15/98-8/31/99

Project Direct Costs: redacted

Specific Aims: To purchase a computer projection system to enhance student presentations in

senior seminar.

49. Title: *Dietary fibers/phytoestrogens and colon carcinogenesis*

Investigators: J.R. Lupton, Co-investigator, (2% effort); ND Turner, PI

Agency: National Institutes of Environmental Health Sciences

Type: P30 (ES09106, Years 1-4); pilot project grant: Period: 9/1/99 - 8/31/00.

Project Direct Costs: \$15,000.

Specific Aims: To develop preliminary data on phytoestrogens and colon cancer for application

for external funding.

50. Title: *Honors Section of Senior Seminar*

Investigators: **J.R. Lupton, Co-PI,** (2% effort); ND Turner, Co-PI Agency: Office of University Honors, Texas A&M University

Type: Funds to support the development of honors courses: Period 9/15/99-8/31/00

Project Direct Costs: redacted

Specific Aims: To develop an honors senior seminar class.

51. Title: Influence of docosahexaenoic acid (DHA 22:6n-3) on p21 ras membrane binding and function.

Investigators: J.R. Lupton, Co-PI (10% effort), R.S. Chapkin, PI

Agency: American Institute for Cancer Research

Type: Research Grant, 7/31/00 - 7/30/02

Project Direct Costs: redacted

Specific Aims: To determine the effect of docosahexaenoic acid on colonic membrane interaction

with oncogenic p21 ras.

52. Title: *Noninvasive mRNA-based detection of colon cancer markers*

Investigators: **J.R. Lupton Co-PI**, (5% effort), R. S. Chapkin, PI Agency: National Institutes of Health/National Cancer Institute

Type: R01 (CA59034; Supplemental Funding): Period 8/1/00 - 7/30/01

Project Direct Costs: \$116,808

Specific Aims: To determine the ability of exfoliated cell mRNA markers to detect colon cancer

in humans.

53. Title: *Colonic cytokinetics and cell signaling: dietary effect* Investigators: **J.R. Lupton, Co-PI** (20% effort); RS Chapkin, PI Agency: National Institutes of Health, National Cancer Institute Type: RO1 CA 59034-05 Years 4-8: Period 9/15/98-8/31/03

Project Direct Costs: \$883,641.

Specific Aims: Experiments are designed to elucidate the role of specific PKC isozymes in colon tumor development by using a targeted pharmacological inhibitor *in vivo* in combination with overexpression and antisense strategies *in vitro*.

Current Support

54. Title: Colonic cytokinetics and cell signaling: dietary effect Investigators: **J.R. Lupton, Co-PI** (20% effort); RS Chapkin, PI Agency: National Institutes of Health, National Cancer Institute

Type: RO1 CA 59034: Period 5/01/03-6/03/08

Project Direct Costs: \$185,000/year for 5 years = \$1,125,000.

Specific Aims: To elucidate the role of n-3 PUFA in reducing colon cancer risk. Specifically,

determine if n-3 PUFA down-modulate tumor formation at the initiation stage of colon

carcinogenesis.

55. Title: Center for Environmental and Rural Health.

Investigators: J.R. Lupton, Director, Nutrition Research Core (5% effort), S. Safe, Pl.

Agency: National Institutes of Environmental Health Sciences

Type: P30 (ES09106) Period: 5/1/02 - 3/31/07.

Project Direct Costs: \$5,000,000

Specific Aims: This is an NIEHS Center for the study of Environmental and Rural Health.

56. Title: Response to DNA Damage: Colon vs Small Intestine

Investigators: **J.R. Lupton, PI** (20% effort)

Agency: National Institutes of Health/National Cancer Institute

Type: RO1 (CA61750): Period: 8/01/94-5/30/05.

Project Direct Costs: \$175,000/year

Specific Aims: The goal of this project is to determine the differences in DNA damage, DNA repair, apoptosis, and reactive oxygen species generation that exist between the small vs large intestine that may explain the difference in small vs large intestinal cancer rates.

57. Title: *Nutritional countermeasures to radiation exposure* Investigators: **J.R. Lupton, PI** (20% effort), N.D. Turner, Co-PI

Agency: National Space Biomedical Research Institute Type: Research Grant: Project Dates: 7/01/01 – 09/30/04

Project Direct Costs: \$1,175,000

Specific Aims: The overall goal of this project is to design diets that protect against radiation-

enhance colon carcinogenesis.

58. Title: *Diet, apoptosis and colon carcinogenesis*

Investigators: **J.R. Lupton, PI** (20% effort)

Agency: National Institutes of Health/National Cancer Institute

Type: R01 (CA82907): Period 2/01/01 – 1/31/2006

Project Direct Costs: \$1,000,000

Specific Aims: To determine the effects of dietary fiber and fat on colon cancer incidence, Cox-

2 expression and induction of apoptosis.

59. Title: Generalized linear measurement error models in nutrition and cancer.

Investigators: **J.R. Lupton, Collaborator** (10% effort), R.J. Carroll, PI.

Agency: National Institutes of Health/National Cancer Institute

Type: R01 (CA57030): Period 7/1/00-6/30/05

Project Direct Costs: \$650,000

Specific Aims: The long term objective of this research project is to develop new statistical

methods for problems involving nutrition, cancer, and related areas.

60. Title: Nutrition, Biostatistics, and Bioinformatics

Investigators: **J.R. Lupton**, **Co-Investigator**, R.J. Carroll, PI Agency: National Institutes of Health/National Cancer Institute

Type: R25 (CA90301): Period: 8/1/01 - 7/31/06

Project Direct Costs: \$2,286,848

Specific Aims: Our goal is to train statistically oriented individuals to function as independent researchers in a multidisciplinary environment focusing on Nutrition and cancer. To achieve this goal we have assembled a team of researchers specializing in Statistics/Biostatistics,

Bioinformatics and the biology of Nutrition and cancer.

61. Title: Gene Expression in Radiation-Enhanced Colon Cancer

Investigators: J.R. Lupton, PI, N.D. Turner; Co-PI

Agency: National Aeronautics and Space Administration (NASA) Washington

Type: NAG-91523 Period: 5/15/2003-5/30/2005

Project Direct Costs: \$240,552

Specific Aims: The goal of this project is to determine if gene expression patterns, using mRNA

from fecal material, are predictive of aberrant crypt development, and whether radiation

treatment or a dietary intervention influences the relationships.

DOCUMENTATION OF RESEARCH -INVITED PRESENTATIONS: National/International

- Diet induced cell proliferation changes in the gastrointestinal tract and their relationship to gastrointestinal cancer. Memorial Sloan Kettering Cancer Research Center, New York, NY. July, 1983.
- 2. Dietary Fiber FASEB Conference. Invited participant in the conference, sponsored by the Federation of American Societies for Experimental Biology. Saxons River, VT, July, 1986.
- 3. The physiological effects of dietary fiber in the large intestine. Food and Drug Administration. Washington, DC, 1987.
- 4. *Fiber and cardiovascular health*. National Conference: Nutrition and Cardiovascular Health, sponsored by the American Heart Association, Austin, TX, 1987.
- 5. Effect of calcium on calcium soap formation. Part of a conference on "Calcium and Cancer", National Dairy Council, Chicago, IL., 1988.
- 6. Effect of fiber type on colon carcinogenesis. Special symposium on diet and cancer as part of the American Association for Cancer Research Meetings, New Orleans, LA, 1988.
- 7. Dietary fiber and carbohydrates in cancer prevention. Designer Foods in Cancer Prevention. A two day symposium. Rutgers, New Brunswick NJ, 1989.

- 8. *Does dietary fiber reduce the risk of cancer?* Nutrition and Cancer Prevention Conference. Sponsored by the American Cancer Society. Austin, TX, November 9,10, 1989.
- 9. *Effect of barley on serum cholesterol*. Presented to Miller Brewing special cereal chemist conference. Milwaukee, WI, November 14, 1989.
- 10. *Dietary fiber: current trends*. Presentation to the research scientists at General Foods, Tarrytown, NY, January 10, 1990.
- 11. *Controversies over fiber*. National Conference sponsored by the American Cancer Society, Partners in Prevention. Houston, TX, October 11, 1990.
- 12. Dietary fiber, short chain fatty acids and colon carcinogenesis. Invited presentation and participation in an international conference on short chain fatty acids: metabolism and clinical importance. Sanibel Island, Fl, December 2-4, 1990.
- 13. Effect of dietary fiber on the colonic luminal environment and epithelial cytokinetics. Invited presentation as part of a symposium on dietary fiber and epithelial cytokinetics at the annual FASEB meeting. Atlanta, GA, April 23, 1991.
- 14. Co-chair, fiber minisymposium at the annual FASEB meeting, Atlanta, GA, April, 1991.
- 15. *Dietary fiber and colon carcinogenesis*. Symposium on diet and cancer. M&M Mars, Hacketstown, NJ, June 13, 1991.
- 16. Fat/fiber interactions: effect on colon cytokinetics. Vahouny Conference on Dietary Fiber (held every four years), Washington, DC, April 13, 1992.
- 17. Effect of fiber fermentability on colonic physiology. Workshop on the "Physiological effects of complex carbohydrates." Sponsored by the International Life Sciences Institute, Washington, DC April 15-16, 1992.
- 18. Fat/fiber/calcium: bile acids and cell proliferation. Norwegian Dairies Association. Oslo, Norway, July 21, 1992.
- 19. Fat/fiber interactions: effect on colon cytokinetics. Nutrition Institute. University of Oslo, Oslo, Norway. July 30, 1992.
- 20. Amount and type of calcium, fat and fiber, effect on fecal bile acids and colonic proliferation. Invited presentation representing the USA, sponsored by Norway, to the Utrecht Group. International Workshop on Dairy Products and Prevention of Colon Cancer. November 10, 1992. Utrecht, The Netherlands.
- 21. *Dietary fiber and colon carcinogenesis*. Symposium on Diet and Carcinogenesis, Rutgers University, College of Medicine, and Cancer Center. New Brunswick, NJ, June 11, 1993.
- 22. Fat/fiber interactions: effect on colon carcinogenesis. "Advances in the Biology and Therapy of Colorectal Cancer," an International Conference, MD Anderson Cancer Center, November 4-7, 1993.
- 23. *Dietary fiber and colon cancer*. Panel Member, FDA-initiated public conference on dietary fiber and cancer and coronary heart disease, to determine if enough scientific evidence exists to make health claims for dietary fibers. Arlington, Virginia, May 12-13, 1994.
- 24. *Colon cancer: The fat/fiber connection.* The Allen lecture, Cedar Crest College, Allentown, PA, October 15, 1994.
- 25. *Dietary fiber and colon cancer*. American Society of Preventive Oncology, Annual meeting, Houston, TX. March 8-11, 1995.
- 26. Fiber fermentability is key to its effect on colon tumor development. Symposium speaker. Symposium on Future Directions in nutrition research at the International Food Technologists annual meeting, Anaheim, CA, June 7, 1995.

- 27. Presentation of the FDA's opinion on the gastrointestinal effects of Olestra at the public hearing for Olestra approval. Food and Drug Administration, Washington, DC, November 14, 1995.
- 28. *Dietary Fiber: An Evolving Perspective.* The Boyd O'Dell Lecture at the University of Missouri-Columbia, March 25, 1996.
- 29. Obtaining funding in an unfriendly world. University of Missouri-Columbia, March 26, 1996.
- 30. The FDA's conclusion on the gastrointestinal effects of Olestra. The Toxicology Forum, Aspen, Colorado, July 8, 1996.
- 31. *Co-chair and summary of presentations*, Diet and Carcinogenesis minisymposium at Experimental Biology, News Orleans, LA, April, 1997.
- 32. *Dietary fiber and colonic cytokinetics*. University of Illinois, Champaign-Urbana, IL, October 31, 1997.
- 33. *Mechanisms by which wheat bran protects against colon cancer*. Conference on "Primary Prevention of Colorectal Cancer and Polyps: The Role of Fiber." Sponsored by the American Health Foundation, New York, New York, and organized by Memorial Sloan Kettering, December 2, 1997.
- 34. *Chair, and overview presentation*, Diet and Carcinogenesis minisymposium at Experimental Biology, San Francisco, April 18-22, 1998.
- 35. *Diet, apoptosis and colon carcinogenesis*. International symposium on apoptosis and cancer, Studenica, Yugoslavia, Institute of Oncology Sremska Kamenica, Novi Sad. Given in absentia due to political unrest in Yugoslavia, June/July, 1998.
- 36. Wheat bran protection against colon cancer- role of butyrate. 6th International Conference on Mechanisms of Antimutagenesis and Anticarcinogenesis, Arcachon, France, October 25-29, 1998.
- 37. Dietary fiber, colonic cytokinetics and colon carcinogenesis. Satellite Vahouny
 Conference. International Meeting on Dietary Fiber. Adelaide, Australia, November 29 December 1, 1998.
- 38. Fat/fiber interactions on colonic cytokinetics: relationship to colon cancer. Nutritional Sciences Seminar. University of Florida, Gainesville, Florida, March 21-22, 1999.
- 39. Butyrate and Colon Cancer: A controversy in need of resolution. The Millennium (Sixth) Vahouny Fiber Symposium. Washington, DC, March 20, 2000.
- 40. *The business of eating right*. The Allen Lecture. Northwood University Business School, Midland, Michigan, April 10, 2000.
- 41. Chair, programmer, and overview speaker for the carbohydrates minisymposium, Experimental Biology 2000, San Diego, April 16, 2000.
- 42. Co-Chair, Energy density minisymposium. Experimental Biology 2000, San Diego, CA, April 16, 2000.
- 43. Co-Chair, Functional Food minisymposium. Experimental Biology 2000, San Diego, CA, April 17, 2000.
- 44. *Structure/function claims. How much science is enough*? National Academy of Sciences, Washington, DC, April 26, 2000.
- 45. Outcomes of dietary fiber clinical trials: where is the science taking us. Mars Nutrition Research Council, Strasbourg, France, May 2, 2000.
- 46. Fat/fiber interactions and their effect on colon carcinogenesis. ISSFAL 2000, 4th Congress of the International Society for the Study of Fatty Acids and Lipids. Tsukuba, Japan, June 4-9, 2000.

- 47. *Nutritional Countermeasures to radiation exposure*. NASA Bioastronautics Meeting. Galveston, Texas, January 18, 2001.
- 48. Presentation of the Food and Nutrition Board's Proposed Definition of Dietary Fiber. Experimental Biology 2001, Orlando, Florida, April 3, 2001.
- 49. Dietary fiber: what is it, what does it do for us, is it protective against colon cancer. Mars Nutrition Research Talks, University of Illinois, Champaign-Urbana, Illinois, May 29, 2001.
- 50. Dietary fiber: The science behind the recommendations. Mars Nutrition Talks, University of Illinois, Champaign-Urbana, Illinois, May 30, 2001.
- 51. Fat/fiber interactions: Effect on colon cytokinetics. Mars Nutrition Talks, University of Illinois, Champaign-Urbana, Illinois, May 30, 2001.
- 52. *Mechanisms by which specific fats and fibers protect against colon cancer.* Mars Nutrition Talks, University of Illinois, Champaign-Urbana, Illinois, May 31, 2001.
- 53. Mechanisms by which specific fats and fibers protect against colon cancer. Colorectal Cancer Prevention Meeting, Rockville, MD. National Cancer Institute's Division of Cancer Prevention, November 3, 2001.
- 54. *Nutrition as a countermeasure to radiation-enhanced colon cancer.* NSBRI, Bioastronautics Meeting. Del Lago, Texas, January 15, 2002.
- 55. *Nutritional countermeasures to radiation exposure* . Kongress Medizin und Mobilitat Munich, Germany, Sept. 12-14, 2002.
- 56. *New recommendations on dietary fiber*. American Dietetic Association Annual Meeting, Philadelphia, PA, Oct. 21, 2002.
- 57. Dietary Fiber recommendations from the DRI Process. Presentation to the Food and Nutrition Board, National Academy of Sciences, Washington, DC, Nov. 6, 2002.
- 58. Carbohydrate recommendations from the DRI Process. Presentation to the Food and Nutrition Board, National Academy of Sciences, Washington, DC, Nov. 6, 2002.
- 59. Overview of all of the Macronutrient Report Recommendations. Presentation to the Food and Nutrition Board, National Academy of Sciences, Washington, DC, Nov. 6, 2002.
- 60. Recent recommendations on Carbohydrates and Fiber. Presentation to the General Mills Nutrition Research Board. Minneapolis, MN, Nov. 7, 2002.
- 61. Overview of the key Macronutrient Report Recommendations. Presentation to the General Mills Nutrition Research Board. Minneapolis, MN, Nov. 7, 2002.
- 62. *Nutrition as a possible countermeasure to radiation exposure.* Bioastronautics Investigators' Workshop, Galveston, TX, Jan. 13-15, 2003.
- 63. Challenges in Developing Dietary Reference Intakes for Energy and Macronutrients. ILSI annual meeting, Miami, FL, Jan. 22, 2003.
- 64. *Dietary fiber and colon cancer: What's the real story?* Thirtieth Annual Texas Human Nutrition Conference, College Station, TX, Feb. 7, 2003.
- 65. *Carbohydrates: Fiber*. Part of the National Academy Symposium on DRIs at Experimental Biology, San Diego, April 11, 2003.
- 66. *Carbohydrates: Starches and Sugars*. Part of the National Academy Symposium on DRIs at Experimental Biology, San Diego, April 11, 2003.
- 67. Evidence that Microbial Degradation Products influence Colon Cancer Risk: The Butyrate Controversy. Part of the Symposium on Diet Induced Changes in the Colonic Environment and Colorectal Cancer, Experimental Biology, San Diego, April 14, 2003.

- 68. Individualized Nutrition and its Potential Impact on the Food Supply: Future Applications of Metabolomics. Chair of the symposium and summary speaker. Food Forum, National Academy of Sciences, Washington, DC, May 6, 2003.
- 69. *Introduction to the DRI Process*. American College of Sports Medicine, San Francisco, CA, May 28, 2003.
- 70. Development, Interpretation, and Application: Dietary Carbohydrate Recommendations. American College of Sports Medicine, San Francisco, CA, May 28, 2003.
- 71. How to integrate teaching, running a laboratory and committee work and remain sane. Danon Institute Mentoring Project, Wye Center, MD, June 9,10, 2003.
- 72. Potential Updates to the 2000 Dietary Guidelines on carbohydrates: new research. Open meeting of the Dietary Guidelines Committee, Washington, DC, September 24, 2003.
- 73. Applying evidence-based science review methodology to the 2005 Dietary Guidelines.

 Open meeting of the Dietary Guidelines Committee, Washington, DC, September 24, 2003.
- 74. Diet and Colon Cancer: Fat/Fiber interactions and their effect on colon cancer incidence. Distinguished Scientist Lecture Series. University of Maryland, College Park, MD, September 25, 2003.
- 75. Dietary Fiber: What it is, what it does and doesn't do for you, how much you need to eat. FDA/CFSAN/OFAS, Food and Drug Administration, Washington, DC, October 28, 2003.
- 76. *Diet and Colon Cancer: Fat/fiber interactions*. Cancer Prevention and Control Colloquia Lecture Series. National Institutes of Health, Rockville, Maryland, December 10, 2003.
- 77. Fat/Fiber interactions and their effect on colon cancer incidence. The Linus Pauling Institute, Oregon State University, Corvallis, OR, February 26, 2004.
- 78. Determining the strength of the relationship between a food, food component or dietary supplement ingredient and a disease or health-related condition. Part of the Symposium on Nutrient Disease Relationships: Closing the Scientific Knowledge Gap, Experimental Biology, Washington, DC, April 19, 2004.
- 79. *Is fiber protective against colon cancer?* Korean Nutrition Society Symposium, Muju, Korea, May 14, 2004.
- 80. The US and Canadian DRIs for carbohydrate and fiber: Science behind the recommendations. Korean Nutrition Society Symposium, Muju, Korea, May 15, 2004.
- 81. Dietary fiber update: what fiber does and doesn't do for you. Lecture for freshmen class College of Human Ecology, Seoul National University, Seoul, Korea, May 18, 2004.
- 82. Fat/fiber interactions and their effect on colon carcinogenesis. Lecture for faculty and graduate students, Department of Food and Nutrition, Seoul National University, Seoul Korea, May 18, 2004.
- 83. The Institute of Medicine, Food and Nutrition Board, National Academy of Sciences Definition of Fiber. Dietary Reference Intakes: Implications for Fiber Labeling and Consumption. ILSI NA Fiber Workshop, Washington, DC, June 1-2, 2004.
- 84. New promises require new criteria: Evaluating and regulating foods/substances that claim to decrease risk of a disease. The Future of Food: Five, Twenty-Five and Fifty-Year Visions A Mars MDRU* Conference MARS Incorporated, McLean, Va., June 7, 2004.
- 85. The Mission to Mars: Food challenges for the astronaut. Benefits and lessons for those still on earth. The Future of Food: Five, Twenty-Five and Fifty-Year Visions A Mars MDRU* Conference MARS Incorporated, McLean, Va., June 7, 2004.

- 86. Dietary Guidelines Advisory Committee: From molecules to dietary patterns. The Food Guide Pyramid: A Call-to Action. Society for Nutrition Education, Salt Lake City, UT, July 18-19, 2004.
- 87. Current status of the definition of dietary fiber in the U.S. and the science behind the recommendation for fiber. Symposium on Dietary Fiber, Japanese Association for Dietary Fiber Research, Osaka, Japan, September 17, 2004.
- 88. *Dietary fiber and colon cancer: Where do we stand now?* Current topics of dietary fiber and the prospects for the future, Japanese Association for Dietary Fiber Research, Tokyo, Japan, September 21, 2004.
- 89. Dietary fiber update: What fiber does for you and how much we should eat. ADA Media spokespersons' Breakfast meeting, American Dietetic Association Annual Meeting, Anaheim, CA., October 4, 2004.
- 90. *Dietary fiber: From molecules to public policy*. 2004 Lucille Hurley Lecture, University of California at Davis, CA. October 18, 2004.
- 91. The new dietary guidelines Part 2, Energy balance, fats, whole grains and carbohydrates, fruits and vegetables. Fall Corporate Affiliates Meeting at Purdue University, October 22, 2004.
- 92. Steps to a national nutrition policy: translating nutrient recommendations and food intake data into food pattern recommendations. Symposium on Nutrition Monitoring and Health Policy Development. Taipei, Taiwan, December 3, 2004.
- 93. *Dietary fiber and colon cancer: where do we go from here.* Sonia Wolf Wilson Lectureship at the University of Texas at Austin, December 10, 2004.
- 94. The importance of optimal nutrition to long duration spaceflight. Johnson Space Center, Space Medicine Grand Rounds, Houston, Texas, January 18, 2005.

DOCUMENTATION OF RESEARCH -TEXAS A&M UNIVERSITY AND LOCAL/STATE INVITED TALKS

- 1. Effect of diet on cell proliferation in the large intestine. O.E. Teague Veterans' Center, Scott & White Memorial Hospital and Clinic, and Medical Sciences, Texas A&M University, November, 1984.
- 2. *Dietary fiber: facts and fallacies.* Texas Human Nutrition Conference, College Station, TX. February, 1985.
- 3. *Dietary fiber and cell proliferation*. Food Science and Technology Seminar Series, December, 1985.
- 4. Role of dietary fiber in the protection against colon carcinogenesis. Environmental Toxicology and Pharmacology Seminar Series. Texas A&M University, January 1986.
- 5. Dietary fiber, cell proliferation and colon carcinogenesis. Texas Carcinogenesis Meeting. MD Anderson Cancer Center, Houston, TX November 11, 1986.
- 6. Dietary fiber and colon carcinogenesis. Presented as part of a joint seminar series on "Nutrition, Immunology and Cancer" sponsored by the University of Texas at Austin and the University of Texas System Cancer Center, Austin, TX, 1987.
- 7. The role of fiber in cancer and heart disease. Two hour seminar as part of a graduate class on "Nutritional aspects of disease". University of Texas at Austin, Austin, TX, 1987.

- 8. *Dietary fiber and colon carcinogenesis*. Part of a seminar series on cancer prevention and control. The University of Texas System Cancer Center. Houston, TX, 1987.
- 9. *Update on dietary fiber*. University of Texas Health Science Center's Teleconference Network of Texas. Broadcast throughout Texas, 1987.
- 10. *Fiber supplements: use and abuse.* Texas Human Nutrition Conference, College Station, TX, February, 1987.
- 11. *The physiological effects of diet on the large bowel*. Presented to the Medical Physiology Group, Texas A&M University, as part of their seminar series, 1987.
- 12. *The physiological effects of diet on the large bowel: update*. Presented to the Medical Physiology Group, Texas A&M University, as part of their seminar series, 1988.
- 13. Update on dietary fiber. Presentation to the Statewide annual conference of Texas Nutrition Extension Agents and Specialists, College Station, TX.
- 14. Fiber supplements: use and abuse. Texas Department of Mental Health, Brenham, TX.
- 15. Update on dietary fiber. San Antonio Health Fair, San Antonio, TX, March 3, 1989.
- 16. *The effects of nutrition on colonic physiology*. Clinical Nutrition Symposium, College of Veterinary Medicine. Texas A&M University. September 10-12, 1989.
- 17. *Mechanisms by which fibers lower serum cholesterol*. Medical Physiology Seminar. Texas A&M University, September 1, 1989.
- 18. *Dietary fiber and colon carcinogenesis*. Texas Carcinogenesis Meeting. September 15, 1989, Austin, TX.
- 19. *Nutrition for the modern woman*. American Association of University Women, College Station, TX, September 18, 1989.
- 20. Mechanisms by which fibers protect against colon carcinogenesis. Nutrition Seminar Series, Texas A&M University, September 25, 1989.
- 21. *Health aspects of dietary fibers*. Medical School, Texas A&M University. Televised on KAMU-TV. September 28, 1989.
- 22. *Research in dietary fiber*. Department of Veterinary Anatomy and Public Health, Texas A&M University. October 10, 1989.
- 23. *Dietary fiber and cancer risk reduction*. Texas Agricultural Extension Service and the American Cancer Society. Teleconference. January 24, 1990.
- 24. *Effect of dietary fibers on serum lipids*. Seventeenth Annual Texas Human Nutrition Conference. College Station, TX, February 16, 1990.
- 25. Fiber: friend or foe. Scott and White Clinic, public forum. College Station, TX, March 22, 1990.
- 26. *Dietary fiber and gastrointestinal physiology*. Comparative Gastroenterology Group, Texas A&M University, May 23, 1990.
- 27. *Nutrition and dietary fiber*. The Eureka Rebels Older Adult Discussion Group. Community service. August 27, 1990.
- 28. *Dietary fiber and colon carcinogenesis*. M.D. Anderson, Gastroenterology Group, Houston, TX, November 7, 1990.
- 29. Effect of dietary fiber on colon carcinogenesis. Environmental Toxicology and Pharmacology Seminar Series, Texas A&M University, November 26, 1990.
- 30. Carbohydrate chemistry and function. Two hour invited lecture to Texas A&M University's Department of Food Services Management Team, Chefs and Supervisors as well as local chefs and Food service professionals. January 7, 1991.

- 31. *Effects of dietary fiber on serum lipids*. Research address for the 10th Anniversary of The Institute for Nutritional Sciences, Texas Tech University, Lubbock, TX, March 13, 1991.
- 32. *How to give a scientific presentation*. Minority High School Student Research Apprentice Program and Lab Start Program. Department of Biochemistry and Biophysics. Texas A&M University, July 11, 1991.
- 33. Dietary fiber type and colon carcinogenesis. Invited speaker, Prevention and screening: Science vs Practicality. Physician Oncology Education Program. San Antonio, TX, August 3, 1991.
- 34. How diet affects colonic contents: how colonic contents affects colonic cell proliferation. Seminar to Faculty of Nutrition. September 18, 1991.
- 35. *How to give a scientific presentation*. Biochemistry Club. Texas A&M University. October 8, 1991.
- 36. *Chair, overview, introductions, Texas Human Nutrition Conference*, College Station, TX, February 7, 1992.
- 37. *Dietary fiber, issues in the food supply*. Food Science Seminar, Texas A&M University, October 12,1992.
- 38. *Chair, overview, introducer, coordinator* of the Texas Human Nutrition Conference, College Station, TX, February, 1993.
- 39. *How to give a scientific presentation*. Minority High School Student Research Program and Lab Start Program, Texas A&M University, July 1, 1993.
- 40. *Nutrition for the health conscious consumer*. Department of Health and Safety, Texas A&M University, July, 1993.
- 41. Fat and fiber and their relationship to colon cancer, the science and practical recommendations. Televised presentation for the Texas Agricultural Extension Service and the American Cancer Society. January 14, 1994.
- 42. *How to give a scientific presentation*. Minority high school student research program and lab start program. Texas A&M University, July, 1994.
- 43. Dietary fiber and colon cancer: do the data justify a health claim for a protective effect? Texas Human Nutrition Conference. Texas A&M University, College Station, TX, February 3, 1995.
- 44. *Dietary fiber and colon cancer*. Kinesiology Seminar series. Texas A&M University, March 3, 1995.
- 45. *How to give a scientific presentation*. To the minority and lab start programs at Texas A&M University, June 29, 1995.
- 46. *How to present a scientific talk*. To the participants in the summer enrichment program of ALPS, Texas A&M University, July 5, 1996.
- 47. *Current nutrition research at Texas A&M*. To the emeritus faculty of the Animal Science Department. June 5, 1997.
- 48. *How to give a scientific presentation*. To the minority and lab start programs at Texas A&M University, July 3, 1997.
- 49. *Managing a research group*. A panel discussion for the Women's Faculty Network. Texas A&M University, October 22, 1997.
- 50. *How to give a scientific presentation*. To the minority and lab start programs at Texas A&M University, November 17, 1997.
- 51. Effects of dietary fiber. Leadership in Medicine, Texas A&M Medical School, January 27, 1998.

- 52. *How to give a scientific talk*. Spring General Meeting of the University Undergraduate Research Fellows, Texas A&M University, March 3, 1998.
- 53. *Diet and colon physiology*. Leadership in Medicine, Texas A&M Medical School, March 10, 1998.
- 54. *Nutrition: the link between agriculture and medicine*. To members of the European Parliament, at Texas A&M University, College Station, TX, June 25, 1998.
- 55. *Diet, nutrition and health.* To members of the Dupont Agricultural Biotechnology Research Team. Texas A&M University, December 16, 1998.
- 56. *Is fiber protective against colon cancer? It depends*. First annual Ethel Ashworth-Tsutsui Memorial Lecture and Award Ceremony. January 22, 1999.
- 57. Effects of dietary fiber. Leadership in Medicine (MEID 901), Texas A&M Medical School. January 26, 1999.
- 58. Facilitator, organizer and speaker. *Texas Food For Health Industry/Academic Roundtable*. Hilton Hotel and Conference Center. College Station, TX. February 12, 1999.
- 59. Fiber and unabsorbed, modified foods -- effects on the colon. Leadership in Medicine (MEID 901), Texas A&M Medical School. March 9, 1999.
- 60. Fat-fiber interactions and their effects on colon cancer. First Annual Scientific Symposium of the Center for Environmental and Rural Health, College Station, TX, May, 25, 1999.
- 61. *Prevention and early detection of colon cancer*. The Vannie E. Cook Jr. Foundation, McAllen, Texas, June 7, 1999.
- 62. *How to give a scientific presentation*. To the minority and lab start programs at Texas A&M University, July 7, 1999.
- 63. Speaking to a scientific or technical audience. Texas A&M University presentation, sponsored by Women in Science and Engineering. October 20, 1999.
- 64. Effect of dietary fiber on the gastrointestinal tract. Texas A&M University presentation at the Medical School. February 22, 2000.
- 65. *How to give a presentation*. Talk for the Office of University Research for all students participating in the Texas A&M Research Week. March 3, 2000.
- 66. *Opportunities in human nutrition*. Talk for High School Science Students at Texas A&M University. March 4, 2000.
- 67. *Effect of diet on colon physiology*. Texas A&M University presentation at the Medical School. March 7, 2000.
- 68. How to live to an old age and feel great about it. Talk with Dr. Ray Bowen, President, Texas A&M University, to the annual meeting of the Houston Texas Aggie Club, Houston, TX, March 25, 2000.
- 69. *Nutrition for the intelligent woman*. Talk with Don Powell, Chair of the Board of Regents, Texas A&M University, First National Bank of Amarillo, Amarillo, TX, April 6, 2000.
- 70. *Nutrition Research Core*. Presentation to the External Advisory Board of the Center for Environmental and Rural Health. May 22, 2000.
- 71. *Nutrition, Physical Fitness and Rehabilitation*. Documentation of the NSBRI budget for 2000, 2001, Johns Hopkins University, August 24-25, 2000.
- 72. *Nutrition research at Texas A&M*. Talk to incoming graduate students about research in nutrition. Biochemistry, August 29, 2000.
- 73. *Nutrition, Physical Fitness and Rehabilitation*. Biannual presentation of research program to the external advisory committee of the National Space Biomedical Research Institute. Johns Hopkins University, September 12, 13, 2000.

- 74. Current controversies in nutrition: The science behind them. Using Nutrition in the classroom to teach basic science. Cast 2000, Plenary Lecture, College Station, TX, October 14, 2000.
- 75. *Nutrition, Physical Fitness and Rehabilitation*. Defense and explanation of program. Mock Site Visit, Houston, TX, November 10, 2000.
- 76. *Nutrition, Physical Fitness and Rehabilitation*. Defense and explanation of program. Site visit for 5 year Renewal of the entire NSBRI program. Houston, TX, November 29-Dec. 1, 2000
- 77. Dietary fiber: What is does and doesn't do for you. Texas A&M Medical School, College Station, TX. February 13, 2001.
- 78. *Nutrition, Physical Fitness and Rehabilitation*. Biannual presentation of research program to the external advisory committee of the National Space Biomedical Research Institute. Houston, TX. March 1-2, 2001.
- 79. *Mock site visit for actual site visit.* Center for Environmental and Rural Health. Nutrition Research Program. Texas A&M, April 17, 2001.
- 80. *Mock site visit for actual site visit.* Center for Environmental and Rural Health. Nutrition Research Program. Texas A&M, May 18, 2001.
- 81. Site visit for competitive renewal of the Center for Environmental and Rural Health. Texas A&M, May 24, 2001.
- 82. *Nutrition, Physical Fitness and Rehabilitation*. Biannual presentation of research program to the external advisory committee of the National Space Biomedical Research Institute. Houston, TX. October 17,18, 2001.
- 83. Butyrate and colon cancer: a controversy in need of resolution. Presentation to Department of Health and Kinesiology, Redox Biology and Cell Signaling Laboratory, Texas A&M University, November 9, 2001.
- 84. How to give a scientific presentation. Texas A&M University, February 5, 2002.
- 85. *Nutrition, Physical Fitness and Rehabilitation*. Biannual presentation of research program to the external advisory committee of the National Space Biomedical Research Institute. San Jose, CA. March 12, 2002.
- 86. How to design diets for animal studies. Texas A&M Vet School, March 21, 2002.
- 87. *The place of nutrition and physical fitness on the International Space Station.* Rice University, March 29, 2002.
- 88. Nutrition Research as a Career. Texas A&M University, April 8, 2002.
- 89. *Macronutrient Report from the DRI Process*. Presentation to the Faculty of Nutrition, Seminar Series, Texas A&M University, October 1, 2002.
- 90. *The Nutrition Research Program*. Presentation for the CERH Competitive Renewal, Texas A&M University, October 31, 2002.
- 91. What are the DRIs and how are they used. Presentation to the Nutrition Club, Texas A&M University, November 19, 2002.
- Note: On sabbatical in Washington, DC during all of 2003.
- 92. National Public Policy in Nutrition: The DRIs; Dietary Guidelines; and the Food Label. Texas A&M, February 2, 2004.
- 93. *Health Claims and the Rules*. Presentation to the Institute of Food Technologists Alamo Section Meeting, Texas A&M University, February 11, 2004.
- 94. *National Nutritional Policy: How does it work?* Presented at Sigma XI Spring Symposium, Texas A&M University, March 25, 2004.

- 95. National Public Policy in Nutrition: The DRIs; Dietary Guidelines; and the Food Label. Presented to Nutrition 430 Class, Texas A&M University, July 7, 2004.
- 96. *Nutrition, Physical Fitness and Rehabilitation*. Biannual presentation of research program to the external advisory committee of the National Space Biomedical Research Institute. Conroe, Texas. September 23, 2004.
- 97. The Dietary Guidelines and the DRI Process: From molecules to foods to dietary patterns. Community Nutrition. Texas A&M University, College Station, TX. September 27, 2004.
- 98. *The 2005 Dietary Guidelines: Departures from the past.* Presentation to The Alamo Section Institute of Food Technologists (IFT) at its mid-year meeting at Texas A&M University, October 1, 2004.
- 99. *The Nutrition Research Core*. Presentation at the CERH annual retreat. Conroe, Texas, October 8, 2004.
- 100. *Public Policy in Nutrition*. Presented at the 30th Annual Texas Student Dietetic Association Conference, Texas A&M University, College Station, Texas, November 20, 2004.
- 101. *The 2005 Dietary Guidelines: Departures from the past.* Faculty of Nutrition Seminar Series, Texas A&M University, College Station, Texas, January 25, 2005.
- 102. The Dietary Guidelines and the DRI Process: From molecules to foods to dietary patterns. Presented to the Community Nutrition Class at Texas A&M University, College Station, Texas, January 28, 2005.
- 103. *Graduate Education: Is it for you?* Presented to Nutrition 289 Class at Texas A&M University, College Station, TX, March 3, 2005.
- 104. Panel on how to obtain funding from the National Institutes of Health. Office of the Vice President for Research, Texas A&M University, March 3, 2005.
- 105. You can be what you want to be (with a few caveats). Invited by the graduating seniors to address them, their families, and fellow students at their first "graduation brunch". Texas A&M University, College Station, Texas, Parents Weekend, April 9, 2005.

DOCUMENTATION OF SERVICE- MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:

American Association for Cancer Research, 1997 - present

American Physiological Society, 1987 - present

American Society for Nutritional Sciences, 1989 - present

DOCUMENTATION OF SERVICE- EDITORIAL BOARDS, AD HOC REVIEWS:

Associate Editor, The Journal of Nutrition, 1994 - 2005. Established office for the Journal at Texas A&M University.

Associate Editor, Nutrition and Cancer, an International Journal, 1999-present.

Regional Associate Editor, American Institute of Nutrition Notes, 1989-1993

Editorial Board, The Journal of Nutrition, 1991-1994

Editorial Board, Current Nutrition Reviews, 2004-

Reviewer of a text book on Nutrition in the Life Cycle, Times Mirror Mosby Publishers.

Reviewer of a chapter in Advanced Nutrition, West Publishing, 1989.

Ad hoc reviewer for:

American Journal of Clinical Nutrition Cancer Epidemiology and Biomarkers Cancer Research Carcinogenesis Cereal Chemistry

Comparative Biochemistry and Physiology

Gastroenterology

Journal of the American Dietetic Association

- Reviewer for position statements on dietary fiber
- Reviewer for position statement on wheat bran and colon cancer

Journal of Parenteral and Enteral Nutrition

Metabolism

Nutrition and Cancer The Journal of Nutrition

DOCUMENTATION OF SERVICE- NATIONAL REVIEW PANELS, COMMITTEE ASSIGNMENTS, AND HONORS:

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1993	Special review committee for NIH/NCI. Review of applications in response to RFA-93-21. "Intermediate endpoints and their modulation by						
	chemopreventive agents." November 15-16, 1993.						
1993	Member, expert panel on psyllium to determine whether or not it should receive FDA GRAS status. Life Science Research Office, FASEB, 1993.						
1994	Ad hoc reviewer, Nutrition and small business grants, Nutrition Study Section, NIH. June 30, 1994.						
1994	Ad hoc member, Nutrition Study Section, National Institutes of Health. October, 1994.						
1994	Special review, diet and cancer proposal, NIH/DDK (Chair).						
1994	Ad hoc reviewer, review special grant for nutrition program at Cornell for USDA.						
1994	Member, expert panel, "Dietary fiber and cancer and coronary heart disease." Food and Drug Administration-initiated public conference to determine whether or not health claims should be made for dietary fibers. May 12-13,						
1005	1994.						
1995	Ad hoc member, Nutrition Study Section, NIH, June, 1995.						
1995-1999	Appointed to Nutrition Study Section, NIH, October, 1995 - June, 1999, Vice Chair (1998, 1999).						
1995	Review, RFA 94-017, NIH/NCI, translational investigator grants for cancer prevention and control.						
1995-97	Special consultant to the Food and Drug Administration on the effect of diet on the gastrointestinal tract with respect to new products: Olestra, Psyllium, Salatrim.						
1996	Special review, NIH Prevention Clinical Trials, CA-96-001. May 6, 1996.						
1996	Special Review, RFA 96-002, NIH/NCI, Dietary exposure to and effects of plant						
	food constituents. July 23-25, 1996.						
1996	Special Emphasis Panel, review, RO1s from members of NIH study sections (ZR62 NTN), October 14, 1996.						
1996	Special Review, Biological and physiological sciences special emphasis panel, National Institutes of Health. ZR62 MEP, November 21, 1996.						
1996	Special review, NIH Translational Investigator grants for cancer prevention and control, RFA CA-96-013, December 18-19, 1996.						
1996	Member, Search Committee, for new Editor of The Journal of Nutrition.						
1996/7	Member, Awards Committee to determine the Borden Award, American Society						
1006 2000	For Nutritional Sciences.						
1996-2000	Represent State of Texas as nutrition advisor to experiment station directors						
1007	(Advisory Committee, area 14, USDA; AC-14). Chair, 1998-1999.						
1997	Special Review, National Institutes of Health. ZRG2 MET, February 26, 1997.						
1997	Special Emphasis Panel. RFA CA-97-014 "Pivotal clinical trials for chemoprevention agent development." National Institutes of Health, August 18, 19, 1997.						
1997	Consultant to FAO/WHO on food additives, Joint Expert Committee on Food Additives, June 17-26, 1997, Rome.						
1997	Committee to determine outstanding teachers, USDA, NASULGEC, Washington, DC, June, 1997.						

1997	Expert reviewer for the American Dietetic Association on the petition of					
1997	Kellogg to the FDA For a health claim for dietary fiber, July, 1997. Expert reviewer for the American Dietetic Association on their position on					
2,,,,	dietary fiber, July, 1997.					
1997	Organizer and programmer for abstracts on diet and cancer for Experimental Biology 1997 and Co-chair of the diet and cancer minisymposium. Presenter of the overview.					
1998	Organizer and programmer for abstracts on diet and cancer for Experimental Biology 1998 and chair of the diet and cancer minisymposium. Presenter of the overview.					
1998	Judge, Graduate Student Research Competition, ASNS, Experimental Biology, San Francisco, CA, 1998.					
1997-99	Member, The Texas International Education Consortium For the Establishment of a Woman's College in Saudi Arabia (Nutrition Program).					
1998	Vice Chancellor's Award for Research, Texas A&M University, 1998. Presented to one individual/year for on-campus research.					
1999-2005	Appointed to Food Forum, Institute of Medicine, National Academy of					
	Sciences.					
2000-2001	Chair, Nominating Committee, American Society for Nutritional Sciences.					
2000	Member, Scientific Advisory Board, Texas Cancer Council.					
2000	Co-chair, Energy Density minisymposium, Experimental Biology 2000, April					
	17, 2000.					
2000	Co-chair, Functional Foods minisymposium, Experimental Biology 2000, April 17, 2000.					
2000	Chair, Carbohydrates minisymposium, Experimental Biology 2000, April 16, 2000.					
2000. 2000-2001 Chair, AC-14, Southern Region chairs of nutrition programs and ad						
	experiment station directors.					
2000	Organizer and programmer for abstracts on carbohydrates for Experimental Biology 2000 and chair of the carbohydrates minisymposium. Presenter of the overview.					
2000-2001	Chair, Panel to determine the definition of dietary fiber, Dietary Reference					
2000 2002	Intake Committee (DRI) of the National Academy of Sciences.					
2000-2003	Chair, Macronutrient Panel, Dietary Reference Intake Committee (DRI) of the National Academy of Sciences to determine scientific guidelines for energy, carbohydrates, fiber, protein and lipids.					
2000-present	Program Leader for Nutrition, Physical Fitness and Rehabilitation, National					
2000-present	Space Biomedical Research Institute. Reappointed, 2005.					
2002	WHO Temporary Adviser for JOINT FAO/WHO Expert Committee on Food					
2002	Additives, Geneva, June 4-13.					
2002-present	Chair, Program Planning Committee, ASNS, Experimental Biology.					
2002-present 2002-2005	Elected Councilor, American Society for Nutritional Sciences (ASNS).					
2002-2003 2002-present	Appointed Lifetime Associate, the National Academy of Sciences					
2003 Visiting Scholar, Food and Drug Administration, College Park, MD. 1						
	appointment.					
	 Appointed to Commissioner's Task Force for Better Nutrition. 					
	TT					

- Received Commissioner's Special Citation and medal for contribution to developing an evidence-based system for health claims.
- Ad Hoc member, Commissioner's Task Force on Obesity.

2003 Search Committee, Editor for The Journal of Nutrition

Appointed to the Dietary Guidelines Committee, HHS and USDA, to help write the 2005 guidelines.

- Chair, subcommittee on carbohydrates
- Subcommittee on evidence-based guidelines and the science behind the guidelines
- Ad hoc reviewer for NASA for international flight projects, meeting July 8, 2004.
- Appointed US nutrition advisor to the international program on artificial gravity for long duration space flight. Reviewed progress to date as a member of the NASA, European, and Russian IMAG Review and Oversight Committee. Bonn, Germany, July 13-14, 2004.
- 2004 Recipient, ASNS/Dannon Institute Award for Mentoring. Given for outstanding mentorship in the development of successful nutritional research science investigators.
- 2004-2005 Chair, Graduate Student Competition at Experimental Biology, ASNS

2004-present Member, Publications Management Committee, ASNS

2004-present Appointed to the Board of Directors, International Life Sciences Institute North

America

2005-present President-elect, American Society for Nutritional Sciences (ASNS)

DOCUMENTATION OF SERVICE- TEXAS A&M UNIVERSITY/LOCAL COMMITTEES

1984-1985 Faculty advisor, Nutrition Club

Committee member, graduate and undergraduate curriculum in nutrition.

Career Day, designed the presentation, manned the booth.

Wrote brochure on nutrition research interests at Texas A&M for distribution to prospective and current graduate students, and undergrads looking for mentors.

Active member, Human Nutrition Conference Committee.

1985-1986 Member, University ad hoc committee to develop proposal to Kellogg Foundation.

Member, College of Agriculture Scholarships Committee.

Member, Human Nutrition Conference Committee.

Faculty advisor, Nutrition Club.

Committee member, graduate and undergraduate curriculum in nutrition.

1986-1987 Member, College of Agriculture Scholarships Committee.

Member, Human Nutrition Conference Committee.

Chair, "Nutrition Research at Texas A&M University", TAES Staff Conference. Judge, Senior Honors Thesis competition, undergraduate fellows program, 1986. Committee member, graduate and undergraduate curriculum in nutrition.

1987-1988 Member, College of Agriculture Scholarships Committee.

Member, Human Nutrition Conference Committee.

Chair, external/internal review of Food Science and Nutrition at Texas A&M University.

1988-1989 Member, College of Agriculture Scholarships Committee.

Member, Human Nutrition Conference Committee.

College of Agriculture Representative to the Council of Principal Investigators.

Gave a short course for the Texas Nutrition Extension agents.

1989-1990 Member, Human Nutrition Conference Committee.

Chaired, organized and was responsible for the Texas Coordinating Board Review of the PhD program in Nutrition.

Co-chair, Comparative Gastroenterology Group, TAMU.

College of Agriculture Representative to the Council of Principal Investigators.

Elected as College of Agriculture Representative to the University Laboratory Animal Care Committee.

Member, Search Committee, Mark Harris Professorship in Veterinary Clinical Nutrition.

Received joint appointment to the Department of Anatomy, College of Veterinary Medicine.

Health Promotion Program Advisory Committee. Appointed by Robert Smith, monthly meetings.

1990-1991 Elected Chair, Faculty of Nutrition

Work with Texas Nutrition Extension Agents to critique papers, give short courses, etc.

Appointed TAMU's representative to the American Association of University Women. Attend monthly board meetings. Attend the National Meeting of AAUW representing the University.

Initiated and chair the Womens' mentoring project for TAMU women faculty members.

On the steering committee of the women's faculty network.

Member, Sigma XI's awards committee, responsible for the community/outreach

Give talks to women's groups, local hospitals and the American Heart Association, American Cancer Society.

Curriculum committee, undergraduate and graduate nutrition.

Member of several department committees to evaluate course content and teaching effectiveness.

Member of committee to evaluate teaching evaluation forms for the department.

Chair of committee to evaluate status of department 485 courses.

Correspond and meet with prospective students for recruitment to graduate and undergraduate programs. Update nutrition research interests recruiting tools.

Elected Chair, Graduate Faculty of Nutrition. Run all meetings, 1990-1993.

Member, Cross Cutting Issues Committee.

Member, retreat to determine how Animal Science will interact with IBT.

Member, Human Nutrition Conference Committee. Chair, 1990,91,92,93.

Co-chair, Comparative Gastroenterology Group, TAMU.

College of Agriculture Representative to the Council of Principal Investigators. Member, Graduate Council.

College of Agriculture Representative to the University Laboratory Animal Care Committee.

College representative to the American Association of University Women.

Health Promotion Program Advisory Committee. Appointed by Robert Smith, monthly meetings.

Appointed to the University committee on the status of women, Dr. W. Perry, Chair.

1991-92 University representative to the American Association of University Women. Appointed by President Mobley.

Initiated and chaired, Women's Mentoring project for TAMU Women Faculty Members.

Member, Sigma Xi's awards committee. Responsible for the community/outreach award.

College of Agriculture's Representative, University Laboratory Animal Care Committee.

Member, Health Promotion Program Advisory Committee. Appointed by Robert Smith.

Member, TAMU Recruitment and Retention handbook Committee. Appointed by Provost Dean Gage.

Report on Council for Women in Higher Education Committee. Appointed by Provost Dean Gage.

College of Agriculture's Representative, Council of Principle Investigators.

Search committee, IBT for Human Nutrition Position.

Curriculum committee, undergraduate and graduate nutrition.

Continued on the committee on the status of women, Dr. W. Perry, Chair.

Chair, Graduate Faculty of Nutrition. Elected by faculty.

Chair, Human Nutrition Conference, 1992. Approximately 500 attendees.

Member, Graduate Program Council. Represent Faculty of Nutrition.

Member, Search Committee for department head, Animal Science.

Member, Grants and Contracts Committee.

Member, Joint Appointments Committee.

Participate in section meetings and in curriculum development meetings.

Board member, American Association of University Women.

Give talks to: local hospitals, American Cancer Society and American Heart Association.

1992-1993 Chair, Faculty of Nutrition

Chair, Human Nutrition Conference

Curriculum committee, undergraduate and graduate nutrition.

Member, Graduate Council

Member, Cross Cutting Issues Committee.

TAMU's representative to the American Association of University Women. Attend board meetings of AAUW monthly. Attend the National Meeting of AAUW representing the University.

Health Promotion Program Advisory Committee. Appointed by Robert Smith, monthly meetings.

Womens' mentoring project for TAMU women faculty members.

TAMU Recruitment and Retention handbook committee. Appointed by Provost Dean Gage, book completed in 1993.

Chair, REP panel on nutrition and food safety. Develop guidelines for submission of REPs and their evaluation. Evaluate and rank REPs and submit ranking and comments to PIs.

Report on the Council for Women in Higher Education Committee. Appointed by Provost Dean Gage, 1992, meetings through 1993.

Chair, search committee for Department Head, Veterinary Physiology and Pharmacology. Appointed by Dean John Shadduck. Conduct search assure faculty participation, report results to Dr. Shadduck.

Search Committee, IBT position in human nutrition.

Search Committee, Department Head, Animal Science.

Search Committee, Assistant Professor, Kinesiology.

Search Committee, Assistant Professor, Poultry Science.

Search Committee, Assistant Professor, Veterinary Anatomy and Public Health.

Member, Grants and Contracts Committee, Dept. of Animal Science.

Member, Joint appointments committee, Dept. of Animal Science.

Member, Human Nutrition Conference Committee 1993-1994

Curriculum committee, undergraduate and graduate nutrition.

Member, Graduate Council

Member, Cross Cutting Issues Committee.

Member, Executive Committee, Faculty of Nutrition

TAMU's representative to the American Association of University Women. Attend board meetings of AAUW monthly. Attend the National Meeting of AAUW representing the University.

Womens' mentoring project for TAMU women faculty members.

Health Promotion Program Advisory Committee. Appointed by Robert Smith, monthly meetings.

TAMU Recruitment and Retention Handbook Committee. Handbook revised in

Report on the Council for Women in Higher Education Committee. Appointed by Provost Dean Gage, 1992, meetings throughout 1993, 1994.

Chair, committee to make recommendations on the proposed Center for Nutrition and Foods, one of four centers under the Institute of Food Science and Technology. Assembled committee, wrote report, 1994.

Search Committee, Internship Director, Nutrition, 1994

Council of Women in Higher Education Committee. Appointed by Provost Dean Gage. 1992.

Search committee, IBT for human nutrition position. Active participation with College Station and IBT.

Chair, committee to make recommendations on the proposed Center for Nutrition and Foods, under the Institute of Food Science and Technology.

Active member of the Faculty of Nutrition.

Human Nutrition Conference, 1995. Active member of the committee, one of six speakers.

Chair, Search Committee, Human Nutrition Position.

1994-95

Section Leader, Human Nutrition

1995-96 Member, Food Processing, Value added committee, appointed by Dr. Hiler, H.R. Cross, Chair.

Active member of the Faculty of Nutrition. Member, curriculum committee.

Human Nutrition Conference, 1996. Active member of the committee.

Member REP Committee.

Member, search committee for the director of Laboratory, Animal Research Resource.

Chair, Nutrition research component of the proposed Toxicology Center Grant.

Member, Committee to reevaluate the role of REP's. Appointed by Dr. Hiler, Dave Appel, Chair.

Member, curriculum committee for nutritional sciences.

Member, core advisors for the Department of Animal Science.

Chair, search committee for new faculty position in human nutrition.

Member, Research Advisory Committee and chair of subcommittee on the philosophy of research problems.

1996-97 Chair, Search Committee, Associate Vice President for Research. Appointed by Dr. Kennedy.

> Member, Food Processing, Value added committee, appointed by Dr. Hiler, H.R. Cross, Chair.

Active member of the Faculty of Nutrition. Member, curriculum committee.

Human Nutrition Conference, 1997. Active member of the committee.

Member, Committee to evaluate the effectiveness of the REP program.

Member, search committee for the director of Laboratory, Animal Research Resource.

Chair, Nutrition research component of the proposed Toxicology Center Grant. Member, Committee to select distinguished Texan in Agriculture. Appointed by

Dr. Hiler.

Member, curriculum committee for nutritional sciences.

Member, Department Research Committee, Fuller Bazer, Chair.

Judge, Science Fair, section head.

Section Leader. Human Nutrition.

Mentor, Womens' Faculty Mentoring Project.

1997-98 Chair, Search Committee, Associate Vice President for Research, Texas A&M University, appointed by Dr. R. Kennedy

> Member, Food Processing, Value added committee, appointed by Dr. Hiler, H.R. Cross, Chair.

Active Member of the Faculty of Nutrition. Member, curriculum committee.

Human Nutrition Conference, 1997. Active member of the committee.

Member, Committee to evaluate the effectiveness of the REP program. Member, Committee to reevaluate the role of REPs. Appointed by Dr. Hiler, Dave Appel, Chair.

Member, search committee for the director of Laboratory, Animal Research Resource.

Member, Search committee for Assistant Professor in Poultry Science

Chair, Nutrition research component of the proposed Toxicology Center Grant.

Member, curriculum committee for nutritional sciences.

Member, Department Research Committee, Fuller Bazer, Chair

1998-99 Active member of the FRDP committee, with frequent meetings, and a major role in planning program project grants. Appointed by Dr. Hiler, chaired by Dale Whittaker.

Active member of the Faculty of Nutrition. Member, curriculum committee.

Human Nutrition Conference, 1998. Active member of the committee.

Member, Search Committee for Assistant Professor Position, Poultry Science.

Member, Search Committee for the Dean of Faculties, appointed by Provost

Chair, Nutrition research component of the Toxicology Center Grant, and member of the Executive Committee, monthly meetings.

Member, Research Infrastructure Committee, appointed by Provost Douglas.

Member, University Wide Faculty Distinguished Achievement Awards Selection Committee. Appointed by Dr. Hiler.

Member, curriculum committee for nutritional sciences.

Member, Department Research Committee, Fuller Bazer, Chair.

Member, Structural and Genomic Sciences in the Life Sciences Committee. 1999-2000

Member, Search Committee, Dean of the Bush School of Public Service

Member, Search Committee, Associate Director, Texas Agricultural Experiment Station

Director, Nutrition Research Core, Center for Environmental and Rural Health, and member of the Executive Committee.

Member, curriculum committee for nutritional sciences.

Member, Department Research Committee, Fuller Bazer, Chair.

Section Leader, Human Nutrition, Department of Animal Science

Member, Search Committee, Exercise Physiology

Member, Search Committee, Instructor position, Human Nutrition

Member, Scientific Advisory Board, Link Equine Funds Committee

Mentor, Womens' Faculty mentoring project. Active participant as mentor and speaker where needed. Mentor two women.

Active member of the Faculty of Nutrition. Member, curriculum committee.

Member, Committee for Endowed Chair in Parks and Recreation

Member, Committee to assess new human subjects requirements for NIH, Texas A&M University, Office of University Research

Representative for College of Agriculture to the Association of Former Students 2000-2001 Distinguished Achievement Awards Selection Committee

Section Leader, Human Nutrition

Member, Search Committee, Dean of the Bush School

Director of Nutrition. Center for Environmental and Rural Health

Member, Executive Committee, Center for Environmental and Rural Health

Member, Search Committee, Assistant Professor, Exercise Physiology

Member, Search Committee, Associate Vice Chancellor, COALS

Member, Search Committee, Director, Dietetic Internship

Member, Search Committee, Assistant Professor for Nutrition, Department of **Animal Science**

Advisory Board Member for the Link Equine Research Program

Chair, internal review of the Reproductive Biology Faculty

Member, curriculum committee for nutritional sciences

Member, Department Research Committee, Department of Animal Science

Member, Full Professors Committee, Tenure and Promotion, Department of

Animal Science

2001-2002 Executive Committee, Faculty of Nutrition

Section Leader, Human Nutrition

Advisory Board Member for the Link Equine Research Program

Member, Ad Hoc Committee on Donor Recognition

Member, Committee to assist in developing a formal proposal for the

establishment of a new Department of Food and Nutritional Sciences.

Mentor, Womens' Faculty mentoring project. Active participant as mentor and speaker where needed. Mentor two women.

Elected Member Faculty Advisory Committee on Proposed Department of Food and Nutritional Sciences

Director of Nutrition. Center for Environmental and Rural Health

Member, Executive Committee, Center for Environmental and Rural Health

Executive Committee, Faculty of Nutrition

Section Leader, Human Nutrition

Member, Committee to assist in developing a formal proposal for the establishment of a new Department of Food and Nutritional Sciences.

Mentor, Womens' Faculty mentoring project. Active participant as mentor and speaker where needed. Mentor two women.

Elected Member Faculty Advisory Committee Executive Committee, Faculty of Nutrition

Director of Nutrition Research Core, Center for Environmental and Rural Health Member, Executive Committee, Center for Environmental and Rural Health Member, Full Professors Committee, Tenure and Promotion, Dept. of Animal Science

2003-2004 On sabbatical at the Food and Drug Administration, Washington, DC until December 31, 2003

Mentor, women's faculty mentoring project. Mentor two women.

Executive Committee, Faculty of Nutrition

Graduate Curriculum Committee, Faculty of Nutrition

Section Leader, Human Nutrition

Member, undergraduate curriculum committee for nutritional sciences

Member, full professors committee for tenure and promotion, Dept. of Animal Science

Director of Nutrition, NIEHS Center for Environmental and Rural Health Member, Executive Committee, NIEHS Center for Environmental and Rural Health

Member, Search Committee, Dean COALS, Vice Chancellor Texas A&M System and Director, Agricultural Experiment Station.

Executive Committee, Faculty of Nutrition 2004-2005

Graduate Curriculum Committee, Faculty of Nutrition

2002-2003

Section Leader, Human Nutrition

Director of Nutrition, NIEHS Center for Environmental and Rural Health Member, Executive Committee, NIEHS Center for Environmental and Rural Health

Member, Search Committee, Dean, College of Agriculture and Life Sciences, Vice Chancellor, Texas A&M System, Director, Experiment Station Member, Search Committee, Department Head, New Department of Nutrition and Food Science